

FreshTrack

1997



The Fresh Produce
Wholesaling System:
Trends, Challenges,
and Opportunities

In-Depth Report



Produce Marketing Association

FOOD INDUSTRY
MANAGEMENT

CORNELL
UNIVERSITY

The Fresh Produce Wholesaling System: Trends, Challenges, and Opportunities

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A number of individuals were instrumental in producing the report. Marc Umscheid orchestrated all mailings, data entry and maintenance with the craft of a grand maestro. Janelle Tauer and Steve Kern provided artistic and graphical expertise in a highly professional and timely manner. We offer them our heartfelt thanks.

Finally, we owe a great debt to the produce industry members who patiently filled out thousands of pages of surveys and answered an equal number of interview questions out of a genuine interest of improving the performance of their industry. Although they were guaranteed anonymity, we thank them individually and collectively. Without their participation, this report would not have been possible.

Foreword

The fresh fruit and vegetable industry has been one of the most dynamic in the U.S. food system for the past quarter century. Approaching the Year 2000, consumer demand for fresh fruits and vegetables is increasing, more sophisticated retail, foodservice and wholesale management practices are producing strong and expanding sales, and suppliers are responding with more flavorful varieties, new technologies and overall increases in efficiency. Yet information about the dynamic fresh produce wholesaling system is lacking.

This report, prepared by the Food Industry Management Program at Cornell University for the Produce Marketing Association, provides an in-depth assessment of the produce wholesaling industry and establishes a set of “benchmark” measures to assist executives in understanding their opportunities and challenges. The report contains results from extensive interviews and mail surveys with executives and organizations from virtually all segments of the wholesale system.

This report is a special in-depth study conducted by Cornell University’s Food Industry Management Program in cooperation with the Produce Marketing Association. We hope you find it both provocative and useful in planning your company’s own future. We welcome your comments.

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Dynamics of the Produce System

Introduction: Rationale for Systemwide Study

The fresh fruit and vegetable industry has been one of the most dynamic in the U. S. food system for the past quarter century. As we approach the Year 2000, consumer demand for fresh fruits and vegetables is increasing, more sophisticated retail and wholesale management practices are producing strong and expanding sales, and suppliers are responding with more flavorful varieties, new technologies and overall increases in efficiency. What's more, numerous federal and state governmental agencies, academic institutions and national health organizations have elevated the importance of the industry further with formal endorsements of the need for increased produce availability and consumption.

A considerable number of opportunities and challenges are the by-products of such dynamism. The objective of this report is to assist in the identification of these opportunities and challenges for the produce wholesale sector through analyses of the structure and standard operating practices of wholesalers in the latter part of the 1990s. The basis of our analyses is a combination of (1)



industry and governmental data with (2) comprehensive mail surveys and (3) formal interviews of produce wholesalers (see Figure 1.1).

The intermediate goal of these surveys is to develop a set of “benchmark” measures that will assist produce wholesale managers in gauging where their firms stand in comparison to their customers and their competitors. Moreover, these benchmarks will examine operational changes, marketing preferences and performance standards. Such information is essential in guiding firms in their strategic planning for the future.

The need for this information is especially keen during such a time of industry growth and change. Although gaps exist in the data, using various federal and industry sources, we are able to estimate the volumes of fresh fruits and vegetables flowing through U.S. distribution channels. We know, for example, that in 1992, U.S. farms produced approximately \$15.6 billion of fruits and vegetables (Table 1.1), slightly over one-third of which is utilized for the fresh market according to the U.S. Department of Agriculture. Thus, when adding approximately \$4.5 billion worth of fresh fruit and vegetable imports and, adjusting for packing and shipping costs, the total supply of fresh fruit and vegetables in 1992 may have ranged from approximately \$16–20 billion. After subtracting \$4.6 billion of exports, the total supply entering the U.S. distribu-

TABLE 1.1

Farm Numbers and Values of U.S. Fruit and Vegetables, 1982–92

	1982	1987	1992
Vegetables			
Farms	68,725	60,753	61,924
Value (\$ billion)	4.1	4.7	6.4
Fruit and Nuts			
Farms	90,291	96,908	89,417
Value (\$ billion)	5.9	7.1	9.2
Total (Fruit & Vegetable)			
Farms	159,016	157,661	151,341
Value (\$ billion)	10.0	11.8	15.6

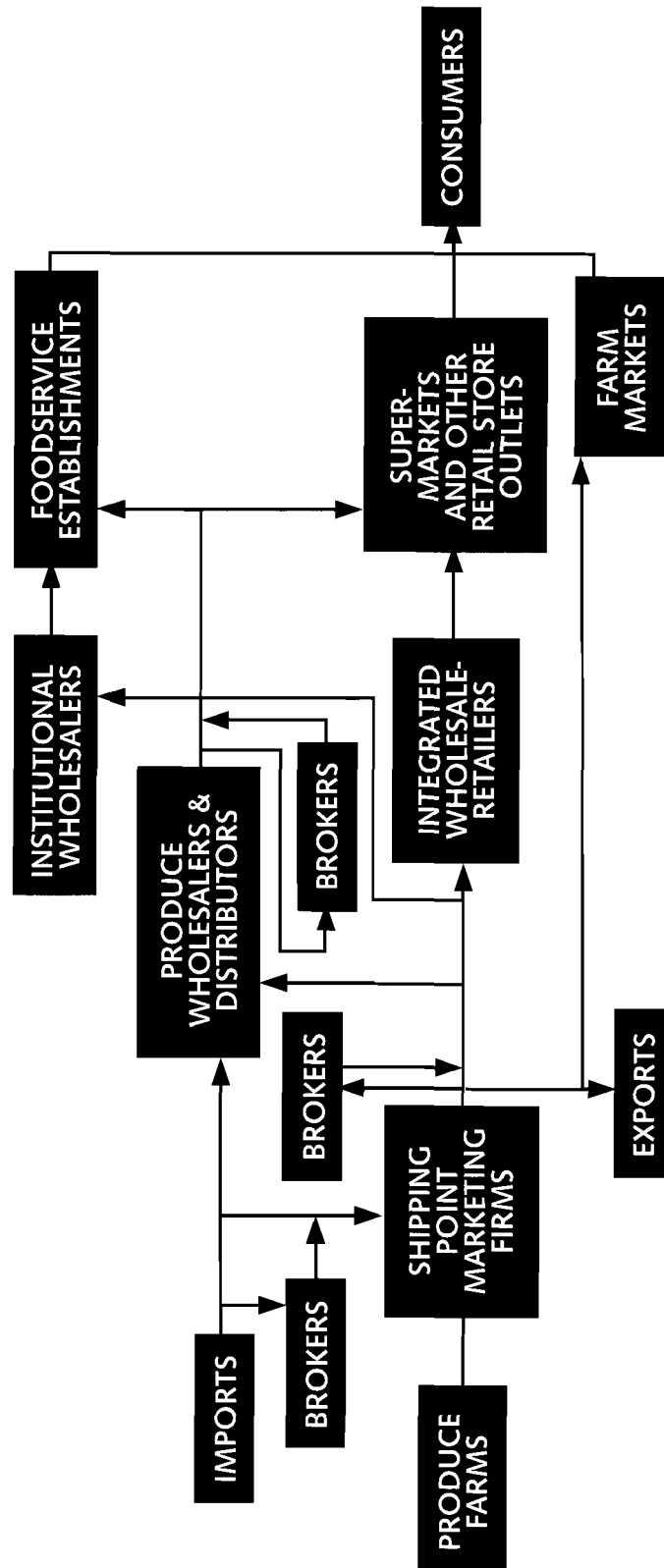
Source: 1992 *Census of Agriculture*, U.S. Department of Commerce Bureau of the Census, 1994.

tion system was roughly \$12–16 billion. Similarly, we can estimate the annual value of total consumption of fresh fruit and vegetable sales to consumers in the mid-1990s to range from approximately \$85–100 billion including some non-fresh “produce” and floral items (Figure 1.1).

However, the very substantial difference between the two, total supply and total consumption, approximately \$75 billion, represents the economic value added by the overall produce wholesaling system: produce packers, field buyers, distributors, brokers, repackers, and various types of wholesalers located both off and on terminal markets that service retail outlets and foodservice

FIGURE 1.1

U.S. Fresh Fruit and Vegetable Marketing System, Mid 1990s



establishments. But *where* exactly this value is added and *by whom* is not currently documented, and indeed the operating practices and expectations of these sectors are not terribly well understood. Although this may be considered the “black box” of the produce distribution system, it is a vital part of the system and essential to its successful operation.

Study Goals, Methodology and Respondent Profile

Goals

This study reports on the wholesaling sector as part of a systemwide investigation of the U. S. fresh produce industry. The study proposes to establish marketing, operational and performance measures to be used for planning and evaluation purposes for both private firm managers and public policy makers who interact with the produce wholesaling industry. Many of these benchmarks will be tracked over time in an annual systemwide study, FreshTrack, in order to develop an accurate picture of industry status, detect new developments in the industry and to signal changes in industry direction and operating practices.

This year, the wholesale sector is identified for special in-depth examination. This theme is common to all industry members and was selected in conjunction with the PMA professional staff and its Board of Directors, to be “the



changing role of the produce wholesaling system.” Here, “wholesaling system” is interpreted very broadly to include virtually all organizations and individuals who play a role in the fresh produce distribution channels between the grower/shipper and the retailer: terminal market operators, various types of produce distributors, brokers, field buyers and importer/exporters.

Methodology

The method guiding this study has three principal components: (1) a review of the relevant trade and academic literature on the fresh produce industry, (2) an extensive national mail questionnaire, and (3) personal interviews with a large number of industry practitioners.

A mail questionnaire was developed in concert with a steering committee of twelve produce wholesale executives selected with help from the professional staff of the Produce Marketing Association to be representative of the many different facets of the produce wholesale industry.

The questionnaire was mailed to a total of 821 produce wholesale executives. The individuals and their mailing addresses were obtained from a variety of sources: various membership lists of the PMA; and additional terminal market wholesalers from the *Green Book*, a produce market information directory produced by the National Association of Produce Market Managers. The design of the questionnaire as well as the mailing procedures conformed to the Total Design Method (TDM) as established by Dillman (1978).

The personal interviews had two objectives. First, through discussions with the industry steering committee and visits to numerous produce operations, efforts were made to ensure that the mail questionnaire solicited the types of information that would be of optimal use and benefit for the industry. Second, once the preliminary analyses of the survey results were conducted, interviews were held with produce industry firms, particularly in the broad “wholesaling” system, to assist with the interpretation of the findings as well as to allow for industry reaction and perspective regarding the initial survey findings. Personal visits were made to six major terminal markets from coast to coast and executives were interviewed from over forty produce companies. Although no attempt was made to be random nor comprehensive in this primary data collection effort, the executives interviewed were selected for their representativeness, geographical dispersion and operational diversity.

Respondent Profile

A total of 205 wholesale firms responded to the *FreshTrack 1997* survey producing a response rate of approximately 25 percent of the total wholesaler surveys mailed (Table 2.1). The respondents represent a broad and comprehensive segment of the industry including brokers, wholesalers, distributors, and importers. Of the one hundred sixty-five survey respondents who reported sales, total company sales average \$98.8 million in 1996, while fresh produce sales average \$41.6 million. Extrapolating these averages to encompass our total sample, our survey represents approximately one-quarter of all U.S. produce wholesaling activity as reported by the most recent *Economic Census* conducted by the U.S. Bureau of the Census (U.S. Bureau of the Census 1992).

TABLE 2.1

Response to FreshTrack 1997 Wholesaler Mail Survey

	Mailed	Total mailed (%)	Received	Response rate (%)
Terminal market wholesalers	290	35.3	34	11.7
Other wholesalers and distributors	371	45.1	122	32.9
Brokers	161	19.6	49	30.4
Total wholesalers	822	100.0	205	24.9

Most importantly, this sample of respondents can be counted to be “representative” of the wholesale produce industry. Along all the most critical dimensions—firm size, firm classification, and geographical dispersion—this sample is typical of what one would expect of the average produce wholesale firm. The geographical representation of our sample, for example, includes firms from each industry segment from East coast to West coast, from North to South and in the approximate density that they are found in the industry itself (Table 2.2). In general, the only area where our sample diverts from an industry “average” is in sales size: respondents to our survey tended to be biased toward a slightly larger size for nearly all industry segments than would be expected from an industry average. This is not surprising, given the greater interest on the parts of larger, perhaps more sophisticated firms, in this type of market research compared to their smaller counterparts.

TABLE 2.2

Survey Response by Location

Segment	East	Midwest	West	Other	Total
Wholesalers	84	50	61	10	205

The approximate dispersion of produce firms across the United States for produce brokers, wholesalers and shippers respectively can be found in Appendix A. These figures have been compiled from the most recent data as calculated from *The Blue Book*.

SECTION 3

Wholesale Produce Industry: Structure, Operations and Competition

The term “wholesalers,” as used throughout this study, refers to a very broad segment of the produce distribution system. It encompasses virtually all types of produce handlers and operators between the shipper’s sales desk and the retailer sector, whether supermarket or foodservice. Included are various types of commission merchants, brokers, distributors, terminal and off-market wholesalers, repackers and importers and exporters. This broad usage is consistent with the term established by the USDA in its 1964 classic produce wholesale study led by Alden Manchester, *The Structure of Wholesale Produce Markets*.



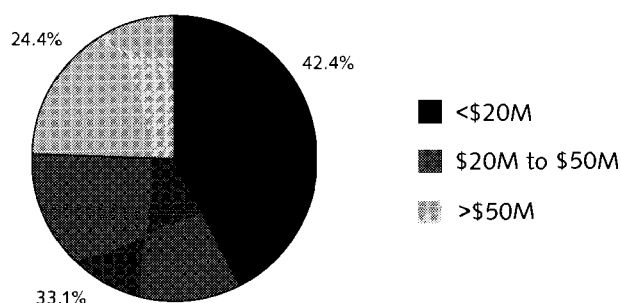
Respondents

Respondent firms are grouped into various categories to provide further perspectives into the survey responses. Where appropriate, these categories are used to further refine wholesale sector benchmarks.

The firms are grouped by: size, business classification, geographic region, and foodservice. Small sized firms are firms with less than \$20 million in company sales in 1996, medium sized firms have \$20 to \$50 million in company sales, and large firms have over \$50 million in company sales. Almost forty-three percent of the respondents are small firms; 33 percent are medium sized firms; and 24 percent of the respondents are large firms (Figure 3.1).

FIGURE 3.1

Wholesaler Respondents by Firm Size

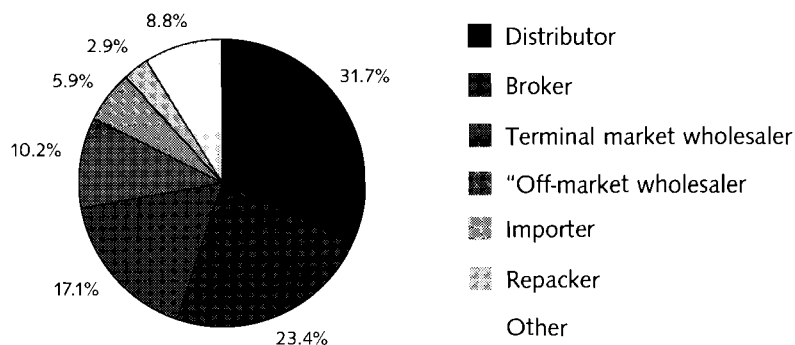


Business classifications and activities

Respondents are also classified by their primary type of business. Classifications are chosen in order to separate businesses by the different tasks they may perform. Respondents ranked their own business operations in order from most important to least important using a list of generalized wholesale business classifications: terminal market wholesaler, “off-market” wholesaler, broker, distributor, repacker, importer, and “other.”

Thirty-two percent of respondents state that their most important operation is that of distributor (Figure 3.2). Almost one quarter (23%) of the respondents consider themselves primarily brokers, and 17 percent are primarily terminal market wholesalers. The remaining respondents are: 10 percent “off-market” wholesalers, 6 percent importers, 3 percent repackers, and 9 percent “other” which include such operations as exporter, consultant, merchandiser and processor.

In another technique of categorizing firms, respondents whose sales to foodservice operators are 75 percent of company sales or greater are designated as foodservice suppliers. Respondents with foodservice sales of less than 75 percent are simply designated “other” suppliers. Firms selling primarily to foodservice accounts numbered 32 or 15.6 percent of all respondents. These foodservice suppliers were equally divided among the three size categories: one-third were small sized firms, one-third medium firms, and one-third large firms.

FIGURE 3.2**Primary Business Classification of Wholesaler Respondents**

To interpret the extent to which our study sample fairly represents the actual U.S. produce wholesale industry, we have categorized listings from *The Blue Book*, a comprehensive credit rating service of companies that trade produce, into the same business classifications used in our study (Table 3.1). *Blue Book* definitions are in italics listed under the corresponding *FreshTrack 1997* business classification. As can be seen, with only minor variation, our sample of wholesaler respondents fairly well represents the U.S. fresh produce wholesaling sector.

TABLE 3.1**Blue Book Wholesalers Categorized by Survey Business Classification**

Wholesale Classifications	% of <i>Blue Book</i> wholesale firms
Terminal market wholesalers	13.7
"Off-market" wholesalers <i>commission merchants, receivers, and jobbers</i>	38.8
Brokers <i>buying, selling</i>	17.9
Distributors <i>distributors and foodservice distributors</i>	18.6
Repackers <i>repackers</i>	1.2
Importers <i>importers</i>	5.5
Others <i>exporters</i>	4.2
Total	100.0

Source: Produce Reporter Co., *The Blue Book*, Fall 1996.

Although wholesalers classify themselves according to their primary business activity, most also perform “secondary” operations. Distributors and wholesalers may also broker product or act as repackers. For example, although 32 percent of respondents consider themselves as primarily distributors, an additional 37 percent of respondents claim to perform distribution activities some of the time (Table 3.2). The result is a total of 69 percent of respondents who report conducting at least some distribution activities.

Furthermore, although only 3 percent of respondents are primarily repackers, many more firms, fully 33.2 percent, provide repacking activities as supplemental business functions. As a matter of fact, repacking is the second largest “secondary” activity performed by all wholesalers, and only slightly less than the number of firms which perform distribution as a secondary activity. The same scenario is seen with importers. Although few firms act primarily as importers, only 5.5 percent, an additional 31.2 percent of respondents import produce as an additional activity of their business.

Several wholesalers interviewed for this study projected that importing may become even more important as a secondary business function, because importing is a difficult activity retailers cannot yet perform well, therefore making them dependent on those who do import. Since retailers and foodservice often find it infeasible to buy direct from grower/shippers overseas, wholesalers can perform this business function for them.

In total, 68.8 percent of all respondents perform distribution activities, buying in large volumes and distributing to accounts without actually handling the physical product. In addition, 54.1 percent serve as brokers for at least some of the time, arranging or negotiating sales for other parties but not physically handling or taking title to the product. Therefore these are the leading activities performed in the wholesale sector. Slightly more than one-third of all wholesalers also perform importing, repacking, and “off-market” wholesaling activities and 28.3 percent terminal market wholesaling. Twenty percent of wholesalers perform other activities including exporting, processing and merchandising.

TABLE 3.2

Wholesaler Activities: Primary and Secondary Functions

Wholesaler classification	Percent as primary activity	Percent as secondary activity	Total
Distributor	31.7	37.1	68.8
Broker	23.4	30.7	54.1
Importer	5.9	31.2	37.1
Repacker	2.9	33.2	36.1
“Off-market” wholesaler	10.2	25.4	35.6
Terminal market wholesaler	17.1	11.2	28.3
Other	8.8	11.2	20.0

The impact of firms becoming more diversified points to a new “blurring of boundaries” in the wholesale sector. During interviews with produce wholesalers, it became evident that traditional definitions of wholesale operations and business classifications have become less distinct, even among industry members. For instance, brokers, in the classic definition and in PACA definitions, do not take title of their product and do not physically handle it. However, in the last two decades firms considering themselves produce brokers have increasingly taken title to product. Moreover, many brokers also now have their own warehouses. However, many still call themselves and primarily consider themselves as brokers.

Location and size of wholesalers

By far, the majority (70.6%) of terminal market wholesaler respondents are from the Eastern region of the U.S. (see Appendix A for definitions of geographic regions). They are also generally smaller than the average produce wholesaler, with 55.6 percent having less than \$20 million in annual sales (see Tables B.1 and B.2 in Appendix B). Importers, too, are located primarily on the East coast (81.8% of respondents) and are relatively small in size with 58.3 percent having annual sales of less than \$20 million.

“Off-market” wholesalers, in general, tend to be medium sized firms: 57.9 percent have annual sales of \$20-\$50 million with more located in the Midwest (52.4%) than in the East or in the West.

There are slightly more distributors and brokers in the East and West coast regions of the U.S. than in the Midwest, and in general, distributors are larger than wholesalers, as only 25.4 percent of distributor respondents are small firms having less than \$20 million in annual sales. Almost 59 percent of brokers are small firms according to annual company sales, however, strictly speaking, brokers do not sell or buy product; they only receive a commission on product. Therefore “sales” may not reflect the actual volume of broker businesses when compared to other firms that actually take title to the product.

Repackers are distributed evenly across the three regions of the U.S. and tend to be medium sized firms with \$20-\$50 million in annual sales, however, there are more large repackers than there are large “off-market” wholesalers.

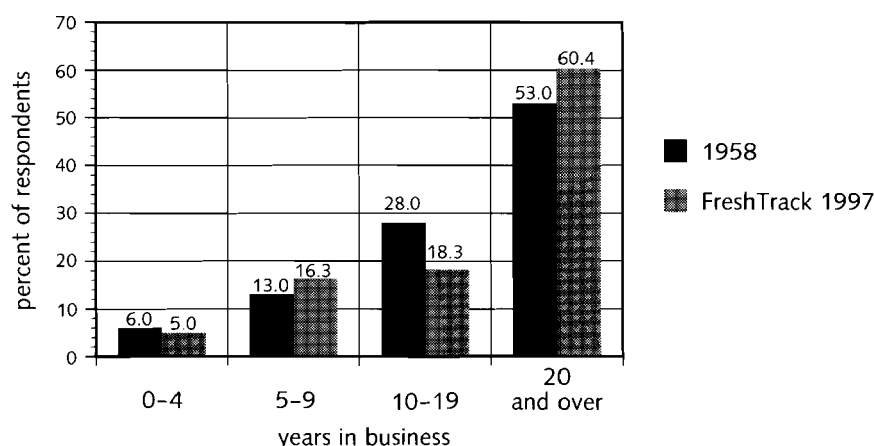
Age of Wholesale Companies

Compared to most other industries, entry into the produce wholesaling business is relatively easy with often modest capital investment requirements. For instance, distributors and brokers may operate without large investments in produce warehouses and transportation equipment, and brokers can operate without the added investment of inventory. Low capital requirements also make exiting relatively easy.

Over 60 percent of all wholesalers in our sample have been in business for 20 years or more, while only 5 percent have been in business for 4 years or less (Figure 3.3). Sixteen percent have been in business for 5 to 9 years and the remainder, 18 percent, between 10 to 19 years. This appears to represent a slight advance in overall age of companies within the industry in the last forty years. It was reported by Manchester (1964) that only 53 percent of produce wholesalers had been in business for 20 years or more (Figure 3.3) indicating a slight advancement in the maturity of the industry but not enough to indicate stagnation or difficult entry.

FIGURE 3.3

Age of Wholesaler Companies by Years in Business, 1958 and 1997



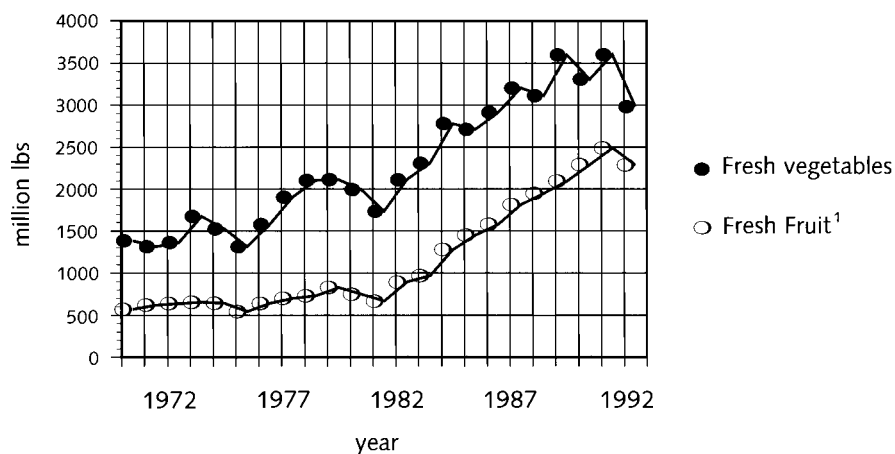
Interestingly, terminal market wholesalers are the oldest business class in the wholesaling sector with 75.8 percent of terminal market wholesalers reporting age of business over 20 years (Table 3.3). The age of terminal market wholesalers may be explained by their continued location at the terminus of the rail-transport of a generation ago combined with today's difficulty in renting or purchasing space on the terminal market, thus limiting the arrival of new firms.

Conversely, importers are in the youngest business class. Only 33.3 percent of importers participating in the study report being in business for more than 20 years, while nearly 60 percent of them state that they have been in business less than 10 years. Such youth is undoubtedly a result of the ease of entry into the import business coupled with recent increases in produce import activity, especially over the past 15 years (Figure 3.4). Similarly, the relative ease of entry and low capital investment requirements explain why over one-quarter of all brokers have entered the produce business within the last decade.

TABLE 3.3

Age of Wholesaler Companies, by Firm Classification

Wholesale Classification	Years in Business			
	0-4 Years	5-9 Years	10-19 Years	Over 20 Years
Terminal market wholesalers	0.0	6.1	18.2	75.8
Repackers	0.0	16.7	16.7	66.7
Distributors	1.6	11.1	22.2	65.1
"Off-market" wholesalers	5.0	25.0	15.0	55.0
Brokers	12.2	16.3	20.4	51.0
Importers	8.3	50.0	8.3	33.3

FIGURE 3.4**Fresh Fruit and Vegetable Imports, 1970-1992**

Source: USDA, *Vegetable Yearbook*, various years and USDA, *U.S.-Mexico Fruit and Vegetable Trade, 1970-92*.
¹Major fruits excluding bananas.

Wholesaler Legal Business Form

Almost 83 percent of wholesale respondents are organized as corporations. This continues a trend documented by the Bureau of the Census where during the past twenty years, a growing percentage of firms have become incorporated (Table 3.4). The proportion of produce wholesalers that are corporations has increased from 55.3 percent in 1972 to 78.9 percent in 1992, the last Census year. According to *FreshTrack* respondents, corporations further increased to 82.9 percent of the total in 1997. Individual proprietorships, partnerships, and cooperatives have generally all experienced declines from 1972 to 1992.

TABLE 3.4**Legal Business Forms of U.S. Fresh Produce Wholesalers**

	Proprietorship	Partnerships	Corporations	Cooperatives	Other
1972	18.5	11.1	55.3	*	15.0
1977	22.1	8.6	64.4	4.8	0.1
1982	17.6	6.5	73.4	2.2	0.2
1987	15.4	5.7	76.7	2.1	0.1
1992	15.1	4.3	78.9	1.7	0.0
1997¹	7.3	6.7	82.9	1.0	2.1

* Not reported for 1972; unusually large "other" seems to account for the omission.

Source: Compiled from Bureau of Census, U.S. Census of Business, *Wholesale Trade, 1972-1992*.

¹ *FreshTrack* 1997 wholesale respondents.

Summary

- *Entry and exit into the produce wholesale sector continues to be relatively easy with reasonable capital investment requirements. This along with a low concentration of firms and an increase in per capita consumption of fresh fruit and vegetables indicate a competitive industry with opportunities for growth in new directions.*
- *Although wholesalers classify themselves according to traditional definitions—e.g., broker, distributor, receiver, and commission merchant—they have increasingly taken on numerous secondary activities which have caused a “blurring of boundaries” such that there are many fewer “traditional firms” in the wholesale sector.*
- *More firms (68.8%) in our FreshTrack 1997 survey perform distribution activities (e.g., buying in full lots and breaking lots to sell without physically handling produce) than any other type of wholesaling activity. Brokering may be considered the second most important activity and is performed by 54.1 percent of all wholesale respondents. Wholesale handling, narrowly defined as purchasing and physically handling produce merchandise, is performed by firms having “off-market” and terminal market wholesaler activities and represent 35.6 and 28.3 percent of respondents respectively.*
- *Although importing is a growing activity, not many wholesale firms consider themselves to be primarily produce importers. It has remained a secondary function despite its difficult nature. Retailers and foodservice operators are generally not willing to take on this function, creating an opportune competitive advantage for wholesalers.*

Sales

Average 1996 company sales for wholesalers in our study is \$98.8 million (Table 3.5). However, half of the businesses are relatively small produce wholesalers with \$22 million or less in 1996 company sales. Company sales from respondents range widely from \$20,000 to \$4.5 billion.

Sales from respondents' top three commodities were collected as one indication of the extent to which companies are specialized or, alternatively, whether they carry a broad array of commodities. The average sales from the top three commodities for wholesalers in our study is only 53.5 percent (Table 3.5), indicating that many companies probably carry a broad line of many different commodities.

Percent gross margin is probably most highly correlated to the type of business operation or classification rather than size or geographic region, because gross margin is more a function of the activities performed and the costs that must be covered the company. The average gross margin for our group of wholesale respondents is 15.0 percent (Table 3.5), but this varies by firm classification. Percent gross margin is significantly less for broker and import firms, 9.9 and 6.7 percent respectively, than for other firm types whose percent gross margin ranges only slightly from 16.0 percent for terminal market wholesalers to 18.9 percent for “off-market” wholesalers (see Table B.3 in Appendix).

TABLE 3.5**Sales Profile of Wholesaler Respondents**

Sales Profile	Respondent average
Company sales (million)	\$98.8
Produce sales (million)	\$41.6
Percent of sales from top 3 commodities (%)	53.5
Average gross margin (%)	15.0

On average, produce sales were only \$41.6 million (42%) of total company sales (Table 3.5). However, this average is misleading. When viewed closely in terms of company size and company classifications, the importance of produce sales relative to sales of non-produce items within the company varies considerably. In small and medium size firms, produce sales are basically the driving force of the firms. Produce accounts for 95 percent and 92.6 percent respectively of overall company sales (Table 3.6). Larger firms, however, are considerably more diversified with produce contributing less than one-third of their overall sales.

On average, brokers and distributors, which include foodservice distributors, can deal in a wide range of other products; fresh produce only accounts for 37.6 percent and 26.6 percent respectively of their total company sales (Table 3.6). However, these results are influenced importantly by the dominance of certain very large brokers and distributors whose sales mix tends to be more diversified than the typical firm. Many small and medium size brokers and distributors do in fact conduct their business in fresh produce exclusively.

TABLE 3.6**Produce Sales as a Percent of Company Sales, by Firm Size and by Classification**

	Produce sales as % of company sales
Wholesaler annual sales	
small: < \$20 million	95.0
medium: \$20 to \$50 million	92.6
large: > \$50 million	32.2
Primary business classification	
Terminal market wholesaler	100.0
Importer	99.5
Other wholesaler	97.4
Repacker	96.3
Broker	37.6
Distributor	26.6

Buying Power

Generally, the largest supermarket buyers are larger than the largest produce wholesalers in terms of produce purchasing power. When ranking the total produce purchases of *FreshTrack* 1997 retail and produce wholesale respondents, 11 out of the top 15 were retail chain buyers and 4 were wholesaler buyers (Table 3.7). Thus whereas major supermarket chains generally purchase a greater volume of produce as a function of their hundreds or even thousands of retail stores, a few of the largest wholesalers have purchasing power equal to or greater than most chains.

According to U.S. Bureau of the Census numbers, there are approximately 6,000 fresh produce wholesale outlets and perhaps as many as 4,000 different produce wholesale firms. Yet these wholesale firms are generally smaller, and more fragmented with less individual purchasing power than their supermarket customer/competitors. Fewer than 250 integrated wholesale-retail grocery companies buy nearly all the produce for over 150,000 retail supermarkets and other grocery outlets.

TABLE 3.7

Top 15 *FreshTrack* 1997 Produce Buyers

	Buyer Type ¹	1996 Produce Purchases ² (\$ million)
1	retail chain buyer	923
2	retail chain buyer	793
3	<i>produce wholesaler</i>	765
4	<i>produce wholesaler</i>	680
5	retail chain buyer	532
6	retail chain buyer	384
7	retail chain buyer	300
8	retail chain buyer	286
9	<i>produce wholesaler</i>	255
10	retail chain buyer	238
11	<i>produce wholesaler</i>	233
12	retail chain buyer	189
13	retail chain buyer	198
14	retail chain buyer	154
15	retail chain buyer	170

¹ retail chain buyer includes supermarket chains and grocery wholesalers; produce wholesaler includes wholesalers, distributors, brokers and foodservice distributors who sell produce.

² estimates

Summary

- *Company annual sales ranged from \$20,000 to \$4.5 billion with 50 percent of firms reporting sales of \$22 million or less. However, a number of substantially larger wholesale firms exist. These largest firms tend to be highly diversified into areas other than fresh produce.*
- *In general, the largest retail chains are larger than the largest produce wholesalers in terms of the volume of produce purchased. Thus, generally, the individual chain buyer tends to have more purchasing power than the individual wholesale buyer. However, the industry has many more wholesale firms than retail firms and thus contributes substantially to moving product from grower to final consumer.*

Product Mix

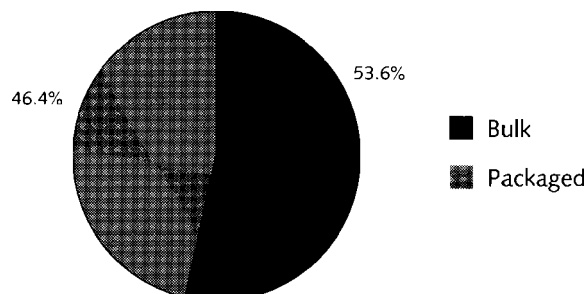
Fresh produce commodities in their natural form have not changed substantially. What has changed, however, is the proliferation of new varieties and of new forms now carried by the industry. New imported fruits and vegetables have flooded the industry as well as numerous new varieties of existing produce. In addition, demand for convenience has coupled with new technologies to generate development of numerous new packages for fresh vegetables, precut salads, and fruits.

Bulk vs packaged

Historically, produce wholesaler sales have been predominantly in bulk, commodity form. Today, the major portion of wholesaler produce sales is still bulk product, generally packed in corrugated cartons (53.6%). However, packaged produce accounts for the remaining 46.4 percent, almost half of sales (Figure 3.5). Packaged products may include boxed fruit or vegetables ready for retailer shelves or may include numerous packs of tomatoes, shrink wrapped fruit, packaged salads, bagged carrots, etc. Many wholesalers indicate the demands for items such as packs of tomatoes alone have increased over the last decade to now include two, three, four, and eight packs, shrink wrapped trays, and display ready cartons packed for easy assembly in a retail store.

FIGURE 3.5

Bulk vs Packaged Wholesaler Sales



Labeling

Labeling is generally viewed as a means of distinguishing certain products and of differentiating one commodity from another. In retailing, private label refers to a supermarket or chain label applied as a method of providing an alternative, usually lower cost, product to consumers and also of enhancing the image of the retailer. Wholesalers in our study indicate that 5.5 percent of their produce sales are packed with the retailer private label and an additional 21.8 percent with their own wholesaler label (Figure 3.6). In some cases, wholesalers may be selling both retailer private label and their own wholesaler label produce to the same retailer.

Sales of labeled produce appears to vary most by firm classification. “Off-market” wholesalers and repackers sell more retailer private label than any other firm type, selling 11.8 and 15 percent respectively with a retailer private label (see Table B.4 in Appendix B). The other wholesalers only sell between 4.0 to 4.9 percent as private label. Most of these do not physically label produce themselves but will order labeling from the packer/shipper. In addition, firms with a large retailer customer base relative to foodservice are likely to have greater private label sales than those with fewer retail customers.

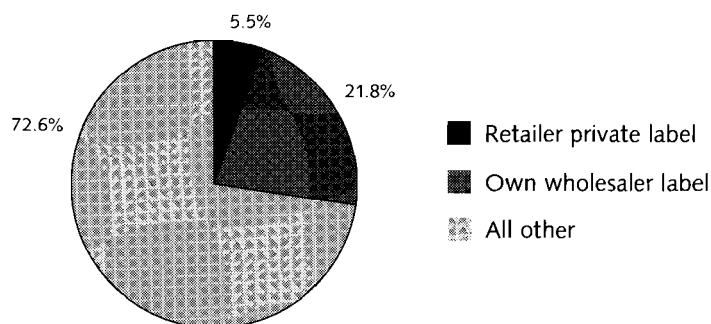
Wholesaler label sales are somewhat different. Repackers and importers are more likely than other firm types to have significant sales of product with their own label.

Repackers, whose sales are 51.0 percent own wholesaler labeled and 15.0 percent retailer private labeled, add significant value to the produce commodities they sell through sorting, handling, and packaging activities. Therefore, they can likely gain more value through a developed labeling program than a simple distributor or broker who does not add value through further grading and packaging activities. Repackers also often customize produce packages to retailer specifications. In addition, the products that a repacker most frequently handles—potatoes, onions and tomatoes—are high volume items that fit naturally into a labeling program.

One reason why importers sell such a large percentage of their produce as own wholesaler labeled product may be because imported product is coming in largely unlabeled, or with a shipper label that is unrecognizable to the U.S. customers.

FIGURE 3.6

Wholesaler Sales by Label Type



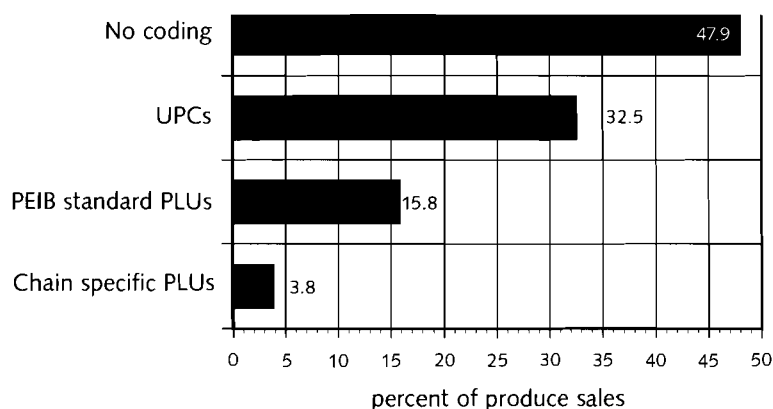
Product codes

Every segment of the produce industry is affected by the opportunities and challenges provided by coding. Opportunities include the ability of codes to streamline inventory and ordering, to better track customer demand, and to provide better customer service in terms of pricing and promotions. Challenges include numerous inventory demands for PLU labels, management time, and packing inefficiencies associated with changing labels and cleaning packing equipment. In addition, as of 1997, there are not yet enough PLUs defined for the increasing number of SKUs being sold through the produce industry channels.

At least three retail coding options may be provided by wholesalers: Universal Product Codes (UPC), Price Look Up (PLU) labels, and no coding at all. Wholesaler respondents indicate that 32.5 percent of their produce sales are UPC coded, while 15.8 percent of sales are coded with standard PLU codes developed by the Produce Electronic Identification Board (PEIB) (Figure 3.7). Some retailers have developed their own PLU codes and these account for 3.8 percent of wholesalers' produce sales. In total, over half (52.1%) of produce being sold by wholesalers is coded in some form.

FIGURE 3.7

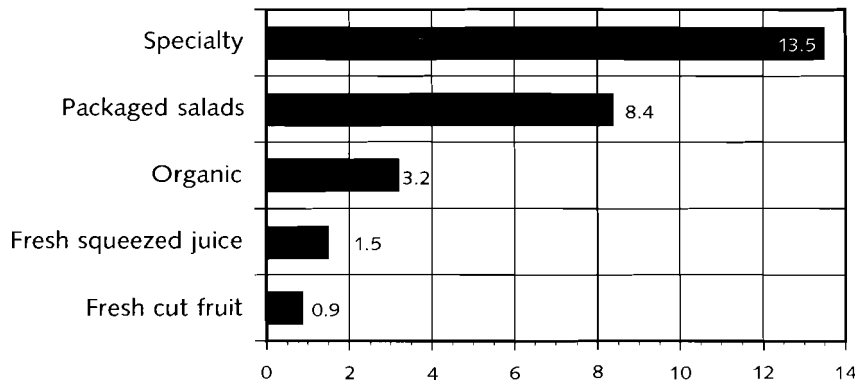
Wholesaler Sales by Coding Type



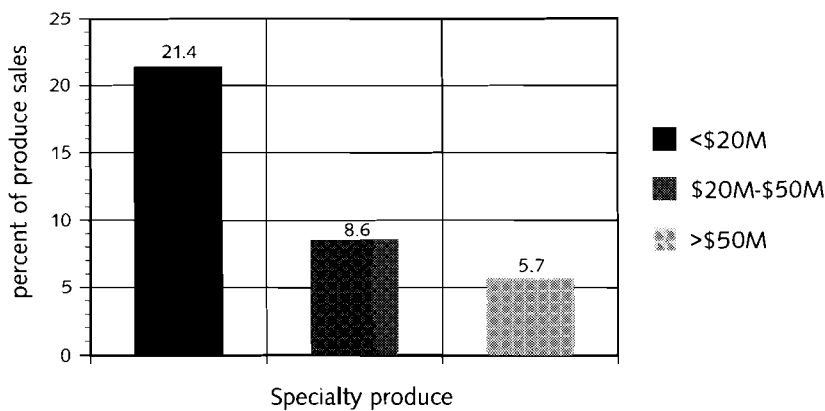
Non-traditional items

Non-traditional produce items are becoming more important and available in most parts of the industry. Wholesalers, for example, indicate that 13.5 percent of their produce sales are specialty products other than organic, while organic produce accounts for an additional 3.2 percent of total sales (Figure 3.8). Packaged salads alone account for an average of 8.4 percent of respondent produce sales.

Wholesalers' involvement in these non-traditional produce items is correlated to company size. Firms whose sales are less than \$20 million report a significantly greater proportion of specialty produce sales than larger firms (Figure 3.9). Specialty produce, generally associated with low relative volumes but high relative prices, may be providing a niche opportunity for these smaller firms. In

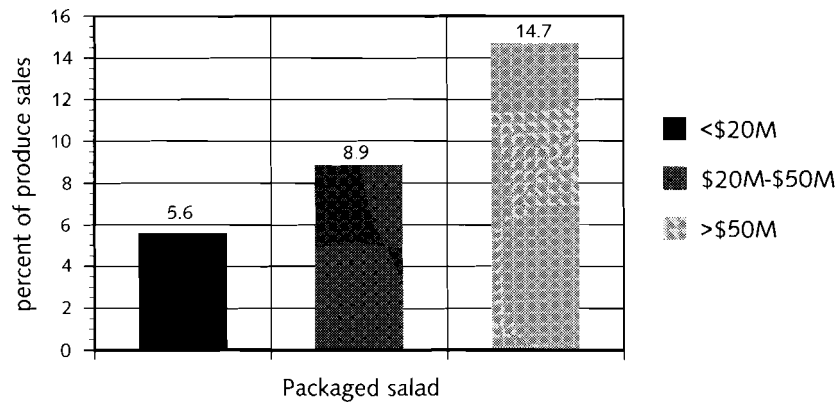
FIGURE 3.8**Wholesaler Sales of Non-Traditional Produce Items**

addition, terminal markets and importers, which also tend to be smaller wholesale firms, report that specialty produce was 16.6 percent and 49.4 percent respectively of their total produce sales, greater than any other firm classification (see Table B.5 in Appendix B).

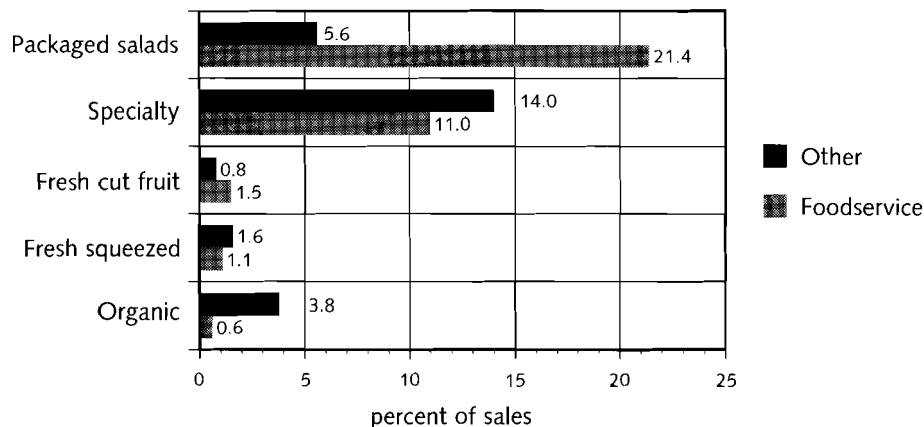
FIGURE 3.9**Wholesaler Sales of Specialty Produce, by Firm Size**

Sales of packaged salads as a percent of total produce sales also vary by wholesaler firm size. Firms with annual sales over \$50 million report that almost 15 percent of their produce sales are from packaged salads whereas packaged salad sales from small firms of less than \$20 million are only 5.6 percent of produce sales (Figure 3.10).

Wholesaler companies were categorized by their proportion of foodservice sales in order to differentiate those wholesalers who sell primarily to foodservice operators. Firms with 75 percent or more of their total sales directed toward

FIGURE 3.10**Wholesaler Sales of Packaged Salads, by Firm Size**

foodservice operators are considered here as foodservice suppliers. These suppliers offer a somewhat different product mix than other produce wholesalers (Figure 3.11). Packaged salads alone account for 21.4 percent of foodservice supplier sales versus only 5.6 percent of sales from other wholesalers. They also sell proportionately more fresh cut fruit, but relatively less specialty and organic produce. Labor saving produce items are important to foodservice operators caught between rising labor costs and a dwindling labor pool for food preparation. But, at the same time they need a consistent quality standard for their menu offerings.

FIGURE 3.11**Produce Sales Mix, by Foodservice Supplier**

Produce SKUs

With the proliferation of specialty products, packaged salads, and other consumer packages, wholesalers are now responsible for managing a larger number of items than in the past. Stock keeping units (SKUs) have increased tremendously. The average number of produce SKUs carried by wholesalers as reported by the *FreshTrack* 1997 survey is 425.4 (Table 3.8). However, this number varies widely by company size. Firms in the largest size category (>\$50 million in company sales) report carrying, on average, almost 741 SKUs. (Figure 3.12).

TABLE 3.8

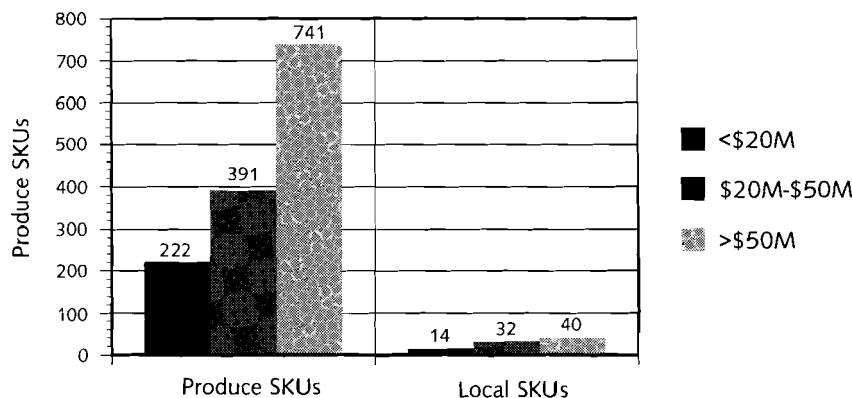
Product Mix of Produce Wholesaler Respondents

	Number of SKUs
Total produce SKUs	425.4
local produce SKUs	31.7
New produce SKUs in 1996	24.1
New non-produce SKUs in 1996	26.9

Most wholesalers on the terminal market that were interviewed indicate that they, too, have broadened their product lines in response to the decrease in volume of historically staple items as chains purchase more of these larger volume items direct. When broadening their product line, terminal market wholesalers indicate that they carry smaller volume items which retailers cannot generally afford to purchase direct.

FIGURE 3.12

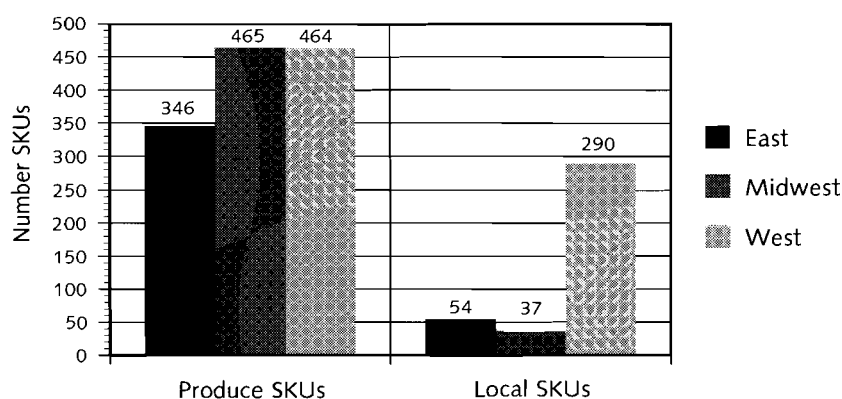
Produce SKUs, by Firm Size



As a means of distinguishing themselves, a number of retailers and restaurants take advantage of local growers and have initiated programs which handle and market locally grown produce. This strategy helps promote freshness, a local, community image for retail and foodservice and also helps maintain sales during the summer season which often have been eroded by local farmers' markets and roadside stands. Some wholesalers also carry locally produced product although the number of local SKUs carried average only 31.7 or just under 7.5 percent of total SKUs (Table 3.8). In general, wholesalers in the West region, closest to the major growing areas, tend to carry more local SKUs than other regions (Figure 3.13).

FIGURE 3.13

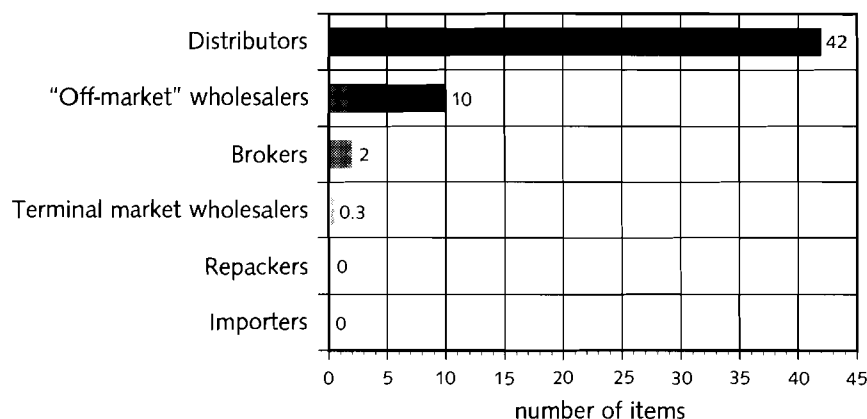
Produce SKUs, by Region



Wholesaler respondents introduced on average 24 new produce items in 1996 (Table 3.8). And similarly, they carried on the average 26.9 new "non-produce" items (Table 3.8). Distributors and repackers added more produce items in 1996, adding 29 and 37 new items respectively, while distributors tended to add more "non-produce" items than any other operation (Figure 3.14), adding a substantial 42 non-produce items in 1996.

FIGURE 3.14

New Non-Produce Items Introduced in 1996, by Firm Classification

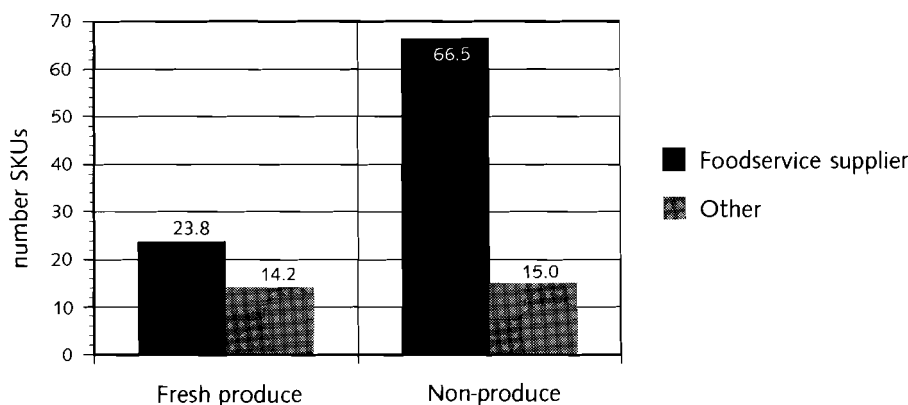


During interviews, some wholesalers indicate that the expansion into non-produce items has been an effort to carry more items normally carried in a retail produce department. This way, they can be the primary produce department supplier for retailers, especially smaller independent retailers.

The substantial number of new, non-produce items may also be explained when examining the foodservice segment of the wholesale population. Foodservice suppliers introduced substantially more non-produce items in 1996 than did other wholesalers (Figure 3.15) due to their more diversified food lines and the heterogeneity of their clientele relative to the specialization in fresh produce of most other produce wholesalers.

FIGURE 3.15

New Produce Items Introduced in 1996, by Foodservice Supplier



Summary

- Wholesalers' product mix is expanding and becoming more complex including substantial sales of value-added produce, retailer private labels and own wholesaler labels, produce coding by UPC or PLU codes, and non-traditional produce items.
- Wholesalers sell more of their own wholesaler label than they do retailer private label, perhaps indicating an opportunity for partnering with retail customers to provide them with a labeling program for their growing produce department.
- Every segment of the produce industry is affected by the challenges and opportunities provided by produce coding. Retailers demand coded produce to assist with category management, however, foodservice operators demand non-coded produce to eliminate labor involved in removing the code labels. This creates problems for wholesalers who handle reconsigned and rejected produce or who need to reroute shipments, because many times they need to either remove unwanted stickers or apply by hand requested stickers. Greater management care is also needed to verify that correct stickers or codes are applied to the correct size and grade of product.

- The use of PEIB standard PLU codes in the retail sector is growing which should eliminate today's non-standard codes and reduce some of the problems with label inventory management.
- Non-traditional produce sales are growing. Specialty sales have perhaps created a niche for smaller wholesalers who can specialize in these smaller volume yet often higher priced items. Larger firms, however, sell proportionately more prepackaged salads than smaller firms perhaps indicating that larger firms are better able to maintain the cold chain from processor to retailer or that larger firms have the customer base desiring more packaged salads.
- The variety and product mixes described above are responsible for a continued increase in the number of items (SKUs) carried by produce wholesalers. A large wholesaler today may carry over 700 SKUs in its inventory. The average total number of new SKUs introduced in 1996 was 51. However, only 24 of these were produce; 27 of them were non-produce items in an apparent effort by some wholesalers to be the major supplier of the entire retail "produce department."

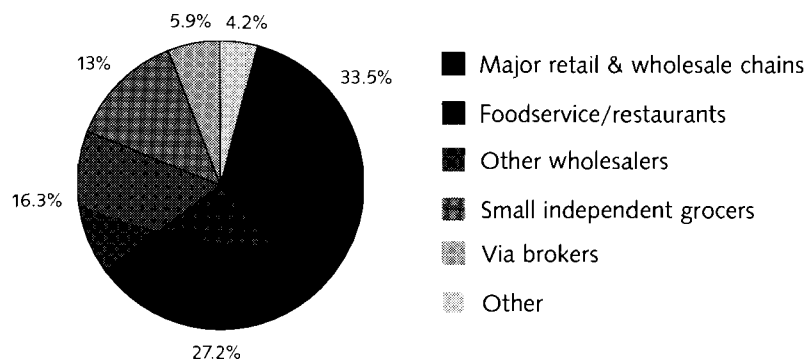
Wholesaler Customers and Customer Services

Customers

Produce wholesalers sell through numerous channels. Overall, wholesaler respondents said that 34 percent of their produce sales go to major retail and wholesale grocery chains (Figure 3.16). So, retail and wholesale grocery chains still account for a major proportion of wholesaler sales despite trade concern about a trend toward disappearing sales to major retail accounts. Substantiating reports of a growing foodservice customer base is the significant proportion of wholesaler sales to the foodservice industry (27.0%), coinciding both with the growth in foodservice sales and in consumer food expenditures away-from-home.

FIGURE 3.16

Wholesaler Sales by Customer Type



Other wholesalers and small, independent grocers account for 16 percent and 13 percent of wholesaler sales respectively. Produce sold through brokers accounts for 6 percent of sales. Other customers including military, processors, and exporters total 4 percent of overall wholesaler sales.

The customer base of each wholesaler classification varies somewhat in a way that perhaps reflects certain strengths inherent in some of these classes. Terminal market sales are divided roughly equally among clientele groups listed below (Table 3.9). Because they historically were the primary source of produce 40 years ago, they are the class which probably has been harmed the most by the increase in retailer chains buying direct from grower/shippers. The major growth in foodservice sales has helped many terminal market operators, however, and currently foodservice accounts for 24.2 percent of their sales.

“Off-market” wholesalers, who have warehouses located off the traditional terminal markets, generally handle more produce sales for grocery and supermarket retailers. Sixty-six percent of their sales are to major retailers and small independents, although foodservice sales are also a significant portion of their business, roughly one-quarter. In general, distributors, which in this survey include foodservice suppliers along with produce distributors, sell a very significant amount to foodservice which receives 44.8 percent of distributors’ sales.

TABLE 3.9

Wholesaler Customers, by Firm Classification
-percent of sales-

	Major retailer	Small independent	Food- service	Brokers	Other wholesaler	Other
Terminal market wholesalers	18.7	25.6	24.2	13.3	13.3	5.0
“Off-market” wholesalers	40.5	25.1	24.1	0.7	9.4	0.2
Brokers	43.4	4.7	13.3	6.9	27.8	4.0
Distributors	24.6	11.9	44.8	1.6	12.4	4.8
Repackers	40.4	4.0	29.6	14.0	12.0	0.0
Importers	49.6	5.6	14.4	15.3	16.4	0.0

Customer Services

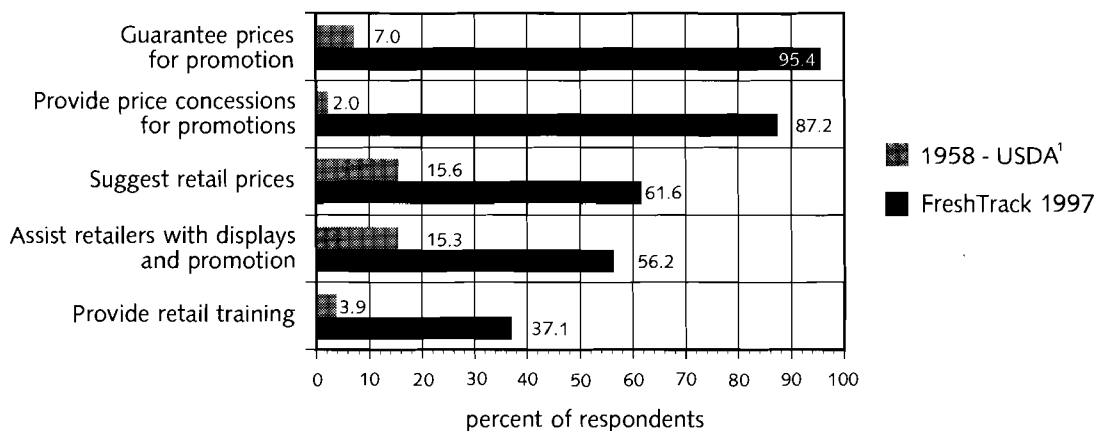
Although wholesalers’ customers include major supermarket retailers, foodservice operators, other wholesalers, small independent retailers, brokers and other customers (see Figure 3.16), it may be observed that not all customers are equal. For example, the relative importance of the largest customers can be judged by noting that survey wholesalers state that 61.3 percent of their sales go to their top ten customers. This is a symptom of the consolidation taking place generally in the retail and foodservice industries. Fewer buyers are available, but those that remain are often of substantial size.

The services provided by wholesalers to their customers depend largely on the customer group. For all retailers, who in general account for almost half of total wholesaler sales, these services may include such items as delivery, merchandising, and product information. In 1958 (USDA, 1964), the merchandising service provided by more wholesalers (15.6%) than any other was “suggesting retail prices” (Figure 3.17). The other merchandising services listed in 1958 in order of frequency were “assisting retailers with displays and promotions” (15.3% of wholesalers); “guaranteeing prices for specials” (7.0%); “training retail produce personnel” (3.9%); and “providing price concessions for specials” (2.0%).

By 1997, many more wholesalers were providing these merchandising services than in 1958. In fact, compared to merchandising and logistical services offered by their predecessors in the 1950’s, today’s wholesaler generally offers an expansive set of services as the rule, not the exception. Moreover, the leading merchandising services have changed since 1958. In 1997, 95.4 percent of *FreshTrack 1997* wholesalers report that they “guarantee prices for promotions” to customers compared to only 7% of wholesalers in 1958. Eighty-seven percent in 1997 report that they “provide price concessions for promotions”; 61.6 percent “suggest retail prices”; 56.2 percent “assist retailers with displays and promotions”; but only 37.1 percent “provide retail training.”

FIGURE 3.17

Wholesaler Firms Offering Merchandising Services, 1958 and 1997



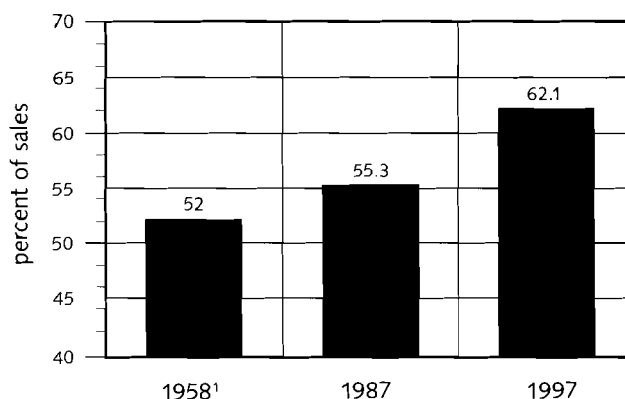
¹ Source: USDA, *The Structure of Wholesale Produce Markets*, 1964.

Delivery is another very important service often provided by wholesalers. In 1958, delivery was reported as the most commonly offered service, except for credit. At that time 77 percent of all wholesalers made deliveries. By 1997, this had changed in some ways. Currently although 88.7 percent of wholesalers offer delivery, delivery is no longer the most commonly offered service. By 1997, “guarantee prices for promotions” was the leading service, offered by 95.4 percent of all wholesalers.

In 1958, 52 percent of total wholesalers' sales were delivered to customers (Figure 3.18). *FreshTrack* 1997 respondents state that in 1987 they delivered 55.3 percent of their sales, only a modest growth over a 30 year period. However, by 1997, deliveries account for 62.1 percent of sales, a more significant increase in the last 10 years than had been seen between 1958 and 1987.

FIGURE 3.18

Sales Delivered by Wholesalers, 1958-1997



¹Source: USDA, *The Structure of Wholesale Produce Markets*, 1964.

Numerous wholesalers stated during interviews that delivery is a very important service which has been offered increasingly within the last ten years. However, apparently it is also a service which in the past some wholesalers have not felt obliged to offer. Terminal market wholesalers indicate that in 1987 delivery was arranged for only 29 percent of sales (Table 3.10). Now, ten years later delivery is arranged for 39 percent of sales. Repackers in particular have increased their deliveries since 1987 when they delivered 43 percent of their sales. Currently they now arrange for delivery for 86 percent of their sales. Indeed, all wholesaler classes except brokers state that they do more delivery now than ten years ago.

TABLE 3.10

Wholesaler Deliveries, by Firm Classification

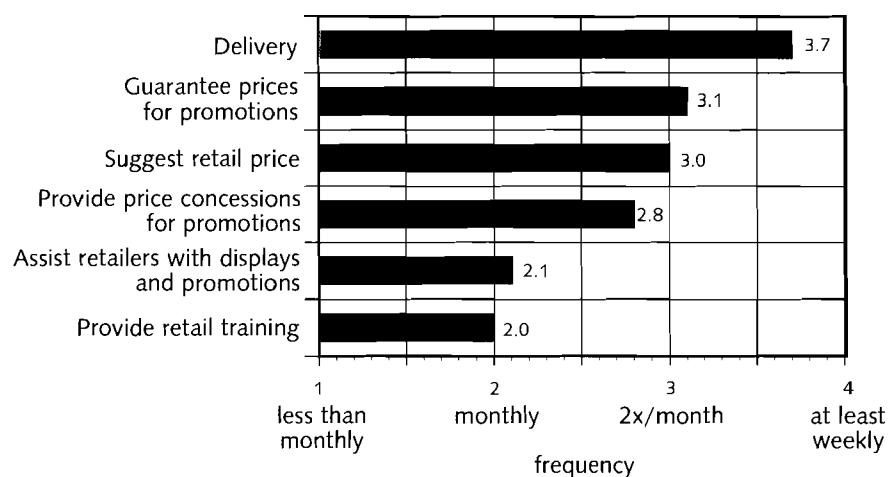
Firm Classification	1987	1997
Terminal market wholesalers	29.1	39.0
"Off-market wholesalers	55.0	73.4
Brokers	51.5	50.8
Distributors	68.5	73.4
Repackers	43.3	86.3
Importers	43.8	52.2
Foodservice vs Other		
Foodservice suppliers	52.6	66.5
Other wholesalers	55.8	61.3

Small independents who do not have the merchandising services available from headquarters, may require merchandising services from suppliers along with information about products, product care and handling, merchandising techniques, promotions and displays and personnel training.

Wholesalers were also asked how frequently they offer the merchandising services discussed above on a scale from 1 to 4 where 1="less than monthly," 2="monthly," 3="twice per month," and 4="at least weekly." For those wholesalers who provide these merchandising services, delivery is the service which wholesalers provide most frequently with an average frequency rating of 3.7, somewhat less frequently than "at least weekly" (Figure 3.19). Those wholesalers who "assist with displays and promotions" and "provide retail training" do so approximately monthly.

FIGURE 3.19

Frequency of Providing Selected Services



The frequency with which these merchandising services are offered varies from company to company and indeed should be a means of differentiating oneself from one's competition. However, variability also shows up when examining merchandising services offered by each wholesaler classification. In Table 3.11 below, each wholesaler firm classification is ranked 1 to 6; where 1=the firm classification providing the service most frequently and 6= the firm classification providing the service least frequently.

In general, distributors and "off-market" wholesalers appear to offer the selected merchandising services most frequently when compared to other wholesaler classes (Table 3.11). Repackers provide some services quite frequently; indeed, they rank number one or two in three of the services listed. However, they rank quite low in frequency of providing the other services. Terminal market wholesalers ranked consistently low in frequency of providing merchandising services when compared with other classes.

TABLE 3.11

Ranking of Frequency of Providing Merchandising Services,
by Firm Classification¹

	Suggest price	Guarantee price for promotions	Price concessions for promotions	Provide retail training	Assist retailers with displays and promotions	Display
Terminal market wholesalers	4	6	6	6	6	6
"Off-market" wholesalers	1	3	3	1	1	2
Brokers	3	4	5	3	3	5
Distributors	2	2	1	2	2	3
Repackers	5	1	2	5	5	1
Importers	6	5	4	4	4	4

¹ firm classifications ranked 1 to 6; where 1=offers most frequently, and 6=offers least frequently.

Interviews with terminal market operators indicate that they see many opportunities for servicing their client groups. Many have indicated a need for more delivery and have recently purchased delivery trucks for the first time. Value-added services, other than merchandising services, reported by terminal market wholesalers during interviews include ripening, breaking packages or repacking, and code dating.

Summary

- *The customer base of each wholesaler classification varies in a way that perhaps reflects certain strengths inherent in some of these classifications. While other wholesaler classifications have major clientele groups, terminal market wholesalers divide their sales almost equally among several clientele groups. Major retail and wholesale chains are the primary customers of "off-market" wholesalers, brokers, repackers, and importers, while foodservice operators tend to be the primary customers of distributors.*
- *A general consolidation of produce buyers is taking place in the retail and foodservice industries, creating fewer but larger wholesaler accounts. Sixty-one percent of wholesaler sales are to their top ten customers.*
- *Merchandising services are offered by a larger portion of wholesalers than at any time in the past, yet it appears that room still exists for wholesalers to compete more aggressively on a service basis. Only 56 percent "assist retailers with displays and promotions" and only 37 percent "provide retail training" yet these are services especially useful to small independent retailers who depend on suppliers to furnish the services otherwise provided by supermarket chain headquarters.*

- *Delivery is cited as one of the most important services that wholesalers can provide, and all wholesaler classifications except brokers arrange for more delivery now than they did ten years ago. This may be particularly onerous to terminal market wholesalers whose warehouses are usually located in downtown metropolitan areas in older facilities which were not constructed for the amount of traffic they currently bear.*
- *“Off-market” wholesalers and distributors appear to offer certain merchandising services more frequently than do other wholesaler classifications. Terminal market wholesalers offer services least frequently, although some have expressed an interest in the apparent greater opportunities for servicing their customers and have added additional, non-traditional services such as ripening of various commodities.*

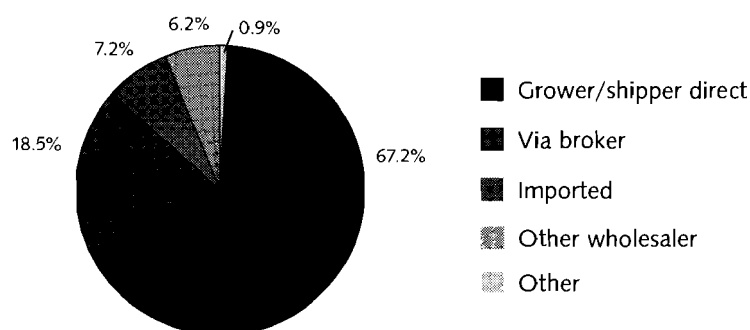
Supplies and Suppliers

Suppliers

In general, wholesalers report that two-thirds of their produce purchases are direct from grower/shippers (Figure 3.20). Fully 18.4 percent of their purchases are through a broker. In addition, wholesalers purchase 7.1 percent (non-banana purchases) from importers. Although more than half of wholesalers indicate they do not handle any imported produce, a significant number of wholesalers may handle 20-30 percent of their inventory as imports at any one point in time. Other wholesalers provide another 6.2 percent of wholesaler purchases.

FIGURE 3.20

Sources of Wholesaler Produce Purchases



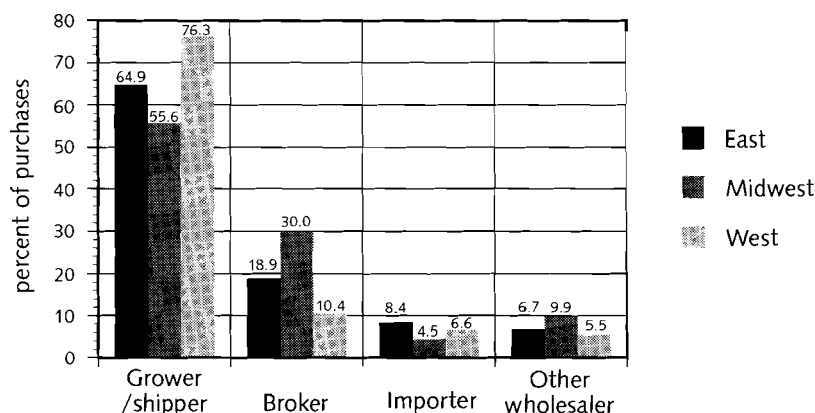
Interestingly all sizes of wholesalers buy proportionately the same amount from grower/shippers and all other sources of produce (see Table B.7 in Appendix B). However, brokers and importers buy direct more than do the other wholesaler classes (see Table B.8 in Appendix B). Foodservice suppliers purchase less than 50 percent of their produce direct from grower/shippers which

is significantly different than other wholesalers (see Table B.9 in Appendix B). Instead, foodservice suppliers purchase significantly more from brokers and “other wholesalers” compared to other firms.

As a function of proximity to production areas, wholesalers in the West region purchase more direct from grower/shippers, whereas wholesalers in the Midwest and East purchase relatively more of their purchases through brokers and from other wholesalers (Figure 3.21).

FIGURE 3.21

Sources of Wholesaler Produce Purchases, by Region



Although produce wholesalers typically procure their products from hundreds of different grower/shippers, their main volume comes from relatively few major suppliers. Respondents indicate that their top ten suppliers account for 71.8 percent of their entire produce purchases. This varies somewhat according to firm size and also by firm classification.

Smaller firms appear to rely more heavily on their top ten suppliers than larger wholesalers purchasing 79 percent of their produce from their top ten, whereas medium and large firms purchase 73 and 63 percent respectively (see Table B.10 in Appendix B). Importers vary significantly from all other wholesalers and purchase 90 percent of their produce from their top ten suppliers.

Supplier Attributes

Top suppliers, besides being chosen for their size and ability to fill required orders, may be selected for other reasons. In order to try to understand what motivates wholesalers to conduct business with certain suppliers, wholesalers were asked to rate how their most highly regarded suppliers perform compared to their average suppliers on 24 key supplier attributes. These attributes can be categorized into five broad conceptual areas: overall produce quality, supplier reputation, supply, price and packaging & logistics. The performance rating scale ranged from 1 to 7 where 1=“below average”; 3=“average”; 5=“above average”; and 7=“excels.”

Among the five conceptual areas, quality attributes, overall, are found to be most important to wholesalers (Table 3.12). This result coincides with previous

research conducted by McLaughlin and Perosio (1994) where supermarket buyers were asked to rank various supplier attributes by their importance in making purchase decisions. The single most important supplier attribute, as determined by that study about supermarket buyers, was the “ability to deliver consistent quality.”

TABLE 3.12

Performance Ratings for Attributes of Highly Regarded Suppliers by Attribute Category

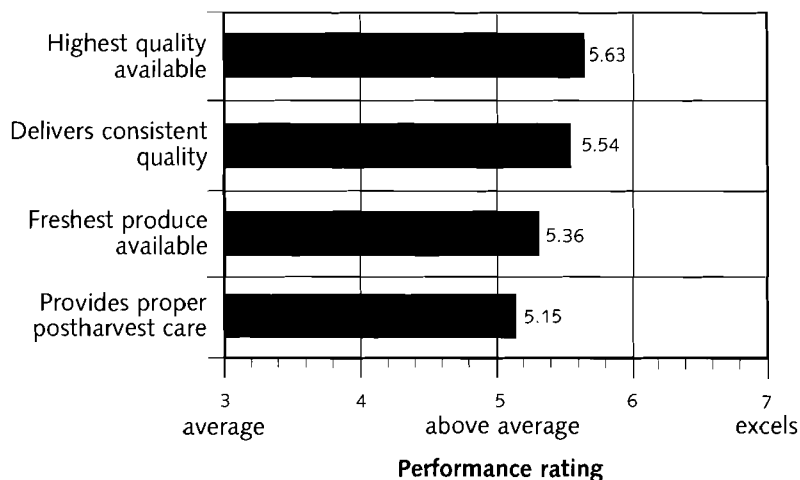
Category	Overall rating ¹
Quality	5.42
Reputation	5.34
Supply	4.63
Price	4.37
Packaging & Logistics	4.24

¹ Performance rating scale ranged from 1 to 7 where 1=“below average”; 3=“average”; 5=“above average”; and 7=“excels.”

In 1997, *FreshTrack* wholesalers responded that the supplier attribute with the highest rating pertaining to quality is “highest quality available” with a rating of 5.63 out of 7 (Figure 3.22). The quality attribute with the lowest score is “provides proper postharvest care” which received a rating of 5.15 from wholesalers.

FIGURE 3.22

Highly Regarded Supplier Attributes: Quality Rankings by Wholesalers



Supplier reputation is the attribute category that received the second highest overall rating by wholesalers (see Table 3.12). In this category, the attribute “honesty & integrity” is not only the attribute with the highest reputation rating, it is also the highest rated individual attribute statement among all the 24 key supplier attributes with a rating of 5.79 (Figure 3.23). The attribute “positive reputation” also ranks very high with a rating of 5.70, even higher than the highest quality rating. Other reputation attributes are not as important, and the lowest rated is “willing to establish partnerships” with a rating of 4.57.

FIGURE 3.23

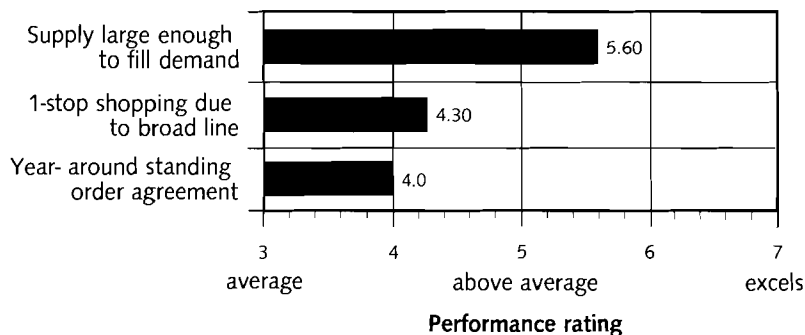
Highly Regarded Supplier Attributes: Reputation Rankings by Wholesalers



Supply, price, and packaging and logistics attributes are all important to wholesalers although to a lesser extent than quality and reputation (Table 3.12). The most important attribute pertaining to supply is “supply large enough to fill demand” with a rating of 5.60 (Figure 3.24) while the least important is “year around standing order agreements” rated 4.00.

FIGURE 3.24

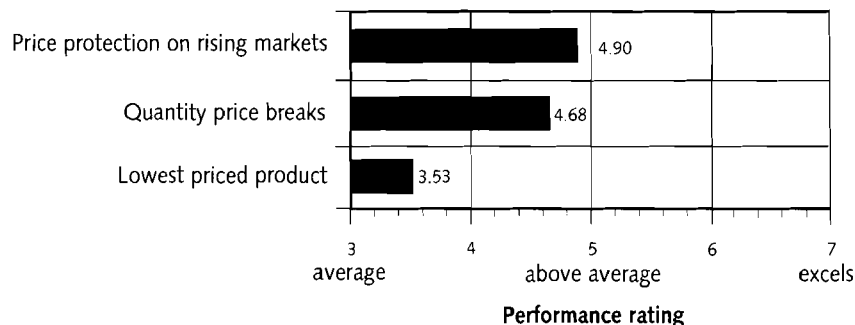
Highly Regarded Supplier Attributes: Supply Rankings by Wholesalers



In the category of price attributes, even the highest individual statement is only rated 4.9, “price protection on rising market” (Figure 3.25). The lowest rated statement in the price category is “lowest priced product,” belying the impression perhaps that the lowest priced supplier is one that receives loyalty from the wholesaler customer.

FIGURE 3.25

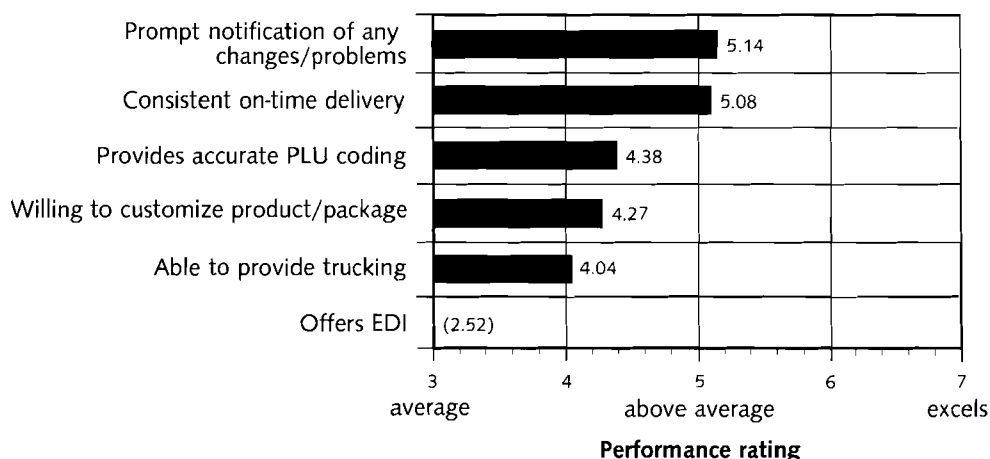
Highly Regarded Supplier Attributes: Price Rankings by Wholesalers



Suppliers who provide “prompt notification of any changes/problems” and “consistent on-time delivery” are appreciated, and these attributes receive ratings of 5.14 and 5.08 respectively from wholesalers (Figure 3.26). However, “offers EDI” only rated 2.52 indicating either that it is not important to wholesalers when selecting highly regarded suppliers or that even the most highly regarded suppliers do not outperform their counterparts in this regard.

FIGURE 3.26

Highly Regarded Supplier Attributes: Packaging and Logistics Rankings by Wholesalers



In summary, the individual attribute statements in order of highest to lowest rating are:

Attribute statement	rating	attribute category
• honesty and integrity	5.79	reputation
• positive reputation	5.70	reputation
• highest quality available	5.63	quality
• supply large enough to fill demand	5.60	product line
• delivers consistent quality	5.54	quality

Only minor differences were revealed when responses were examined by region, size and firm classification. Tables B.11 and B.12 in Appendix B illustrate the similarity in responses by firm classification when viewing them by attribute category and by the highest rated individual attribute statements.

The predominance of reputation, while not the category with the highest overall rating, indicates the critical importance of such characteristics as honesty and integrity in a leading supplier. Perhaps because the produce industry has historically been one filled with “opportunism” a certain distrust evolved between sellers and buyers. Yet in an industry where almost three-quarters of all product purchases of individual firms are from ten suppliers, distrust can lead to missed opportunities in discovering system efficiencies and performance improvements.

Summary

- *All wholesalers irrespective of size, source proportionately the same (2/3 of all purchases) from grower/shippers, however sources of produce do vary somewhat by geographic region and by firm classification. Not surprisingly, Eastern and Midwestern wholesalers purchase relatively more through brokers and other wholesalers than do Western wholesalers. Also wholesale foodservice suppliers purchase proportionately more from brokers and “other wholesalers” and purchase less than 50 percent direct from grower/shippers.*
- *Wholesalers rely heavily upon their top ten suppliers who provide 72 percent of all wholesaler produce purchases. Small firms rely more heavily still on their top suppliers, purchasing nearly 80 percent of all their needs from ten suppliers.*
- *Wholesalers’ most highly regarded suppliers outperform the rest in many different ways. Out of 24 selected key supplier attributes, the two attributes that these suppliers performed particularly well in were “honesty and integrity” and “positive reputation.” After grouping the attributes into 5 different categories, however, the leading category was product “quality.”*

Operations

Purchasing

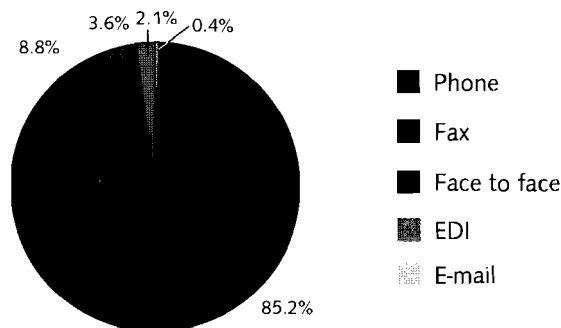
The process and methods of purchasing produce have not changed significantly since the advent of the telephone. Wholesalers’ produce purchases are made primarily by phone with survey respondents indicating that 85.2 percent of

their purchases are made using the phone (Figure 3.27). Faxes are also used for purchasing 8.8 percent of the time. Face-to-face purchases are occasionally made (3.6% of purchases), and purchasing via EDI and e-mail are also used to a small extent (2.1% and 0.4% respectively).

Judging by industry response, purchasing by phone is still the most effective method of purchasing. Although faxes are becoming very important and EDI and e-mail are providing some additional methods, purchasing and ordering in the produce industry still requires person-to-person contact. While “high tech” methods are being used and will likely be used increasingly in the future, they will likely be used only for selective orders or for confirming orders.

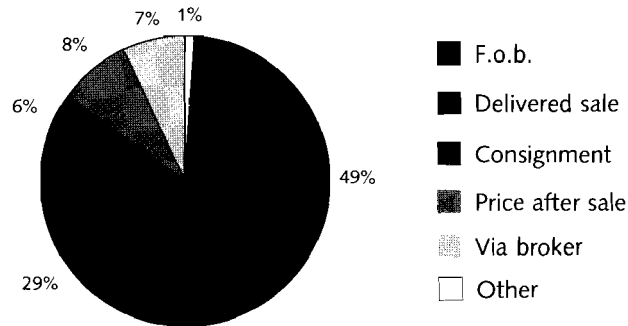
FIGURE 3.27

Wholesalers' Primary Purchase Methods



Terms of trade: In general, close to half of all produce purchases made by the wholesale sector are made employing free-on-board (f.o.b.) pricing (Figure 3.28). In this mechanism, all responsibility for transportation cost and, in general, for produce transport is with the buyer. Buyers indicate that with their own trucks already on the road, f.o.b. terms are often preferred. F.o.b. is also favored by many sellers who do not want to assume the risks and costs of trucking.

Delivered sales accounts for 29.0 percent of all wholesaler produce purchases. When using the term “delivered sales,” sellers are responsible for transport charges and quality assurances to the buyers’ dock. In these circumstances, sellers may benefit when they control their own transportation network and want to operate it to maximize profits. Sellers may also choose to offer more delivered sales versus f.o.b. when they need to liquidate surplus inventory. In those cases, they may offer the transportation at a very reduced rate, and therefore not jeopardize their f.o.b. price but still offer a better overall value. However, some in the industry believe that buyer rejection is more likely with a delivered sale than a f.o.b. sale, since, at that late point, the seller has very limited available alternatives.

FIGURE 3.28**Wholesaler Purchases by Purchase Terms**

Although there do not appear to be any regional or size differences in wholesalers' preference between the purchase terms f.o.b. versus delivered price, there are some slight differences in preference by firm classification. Repackers and distributors use delivered price versus f.o.b. more frequently than do other firm classifications (Table 3.13), whereas importers and terminal market wholesalers use it less frequently. When wholesalers are grouped by foodservice suppliers and other, foodservice suppliers in particular use delivered sales more frequently than other wholesalers (Table 3.13).

TABLE 3.13**F.o.b. vs Delivered Price Terms, by Firm Classification**

Firm Classification	F.o.b.	Delivered price
Distributors	49.0	31.5
Repackers	54.7	33.2
Brokers	56.6	28.1
"Off-market" wholesalers	55.3	26.5
Importers	37.5	15.9
Terminal market wholesalers	40.3	16.5
Foodservice vs other		
Foodservice suppliers	43.6	36.4
Other wholesalers	50.1	27.5

Under some circumstances, sellers may send a shipment to a buyer deferring actual price establishment until after the final sale is consummated. Often, sales of this type involve distressed produce, previously rejected merchandise, or produce unsold by shippers' direct sales agents during a time of over-supply.

Historically, the most common price-deferred term of sale was the consignment sale. Currently, consignment sales are only 6 percent of overall purchases (Figure 3.28). However, a near equivalent technique, "price-after-sale," represents an additional 8.2 percent of purchases.

Price-after-sale is a purchase term that has emerged over the last 40 years. It is quite similar to consignment in that produce is shipped to a handler with no set price. When consignment and price-after-sale terms are combined, they represent 14.1 percent of wholesaler purchase terms.

However, these sale conditions are much more prevalent for terminal market wholesalers and importers. Consignment terms for these two wholesaler classifications amount to 11.0 percent and 39.2 percent of all purchases for terminal market wholesalers and importers respectively (Table 3.14). Price-after-sale terms account for 29.3 percent and 6.9 percent respectively of purchases. The importance of terminal markets in handling products being sold in this manner appears to be significant while importers apparently handle more consignment sales as a means to decrease risk associated with distant suppliers.

TABLE 3.14

Consignment and Price-After-Sale Terms, by Firm Classification

	Consignment	Price-after-sale	Total
	-% of produce purchases-		
Importers	39.2	6.9	46.1
Terminal market wholesalers	11.0	29.3	39.3
"Off-market" wholesalers	1.8	7.8	9.6
Brokers	3.5	7.2	8.7
Repackers	5.7	2.8	8.5
Distributors	2.2	3.3	5.5

Overall, wholesale purchases made through brokers were only 7.1 percent of their total but there are significant differences across firms sizes and classes. Firms which make proportionately more purchases through brokers are: large firms, distributors—in particular foodservice distributors—and "off-market" wholesalers (Figures 3.29 and 3.30).

FIGURE 3.29

Wholesaler Purchases Via Brokers, by Firm Size

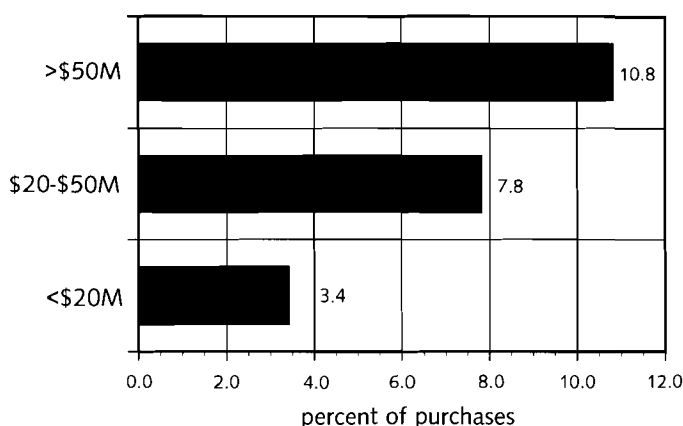
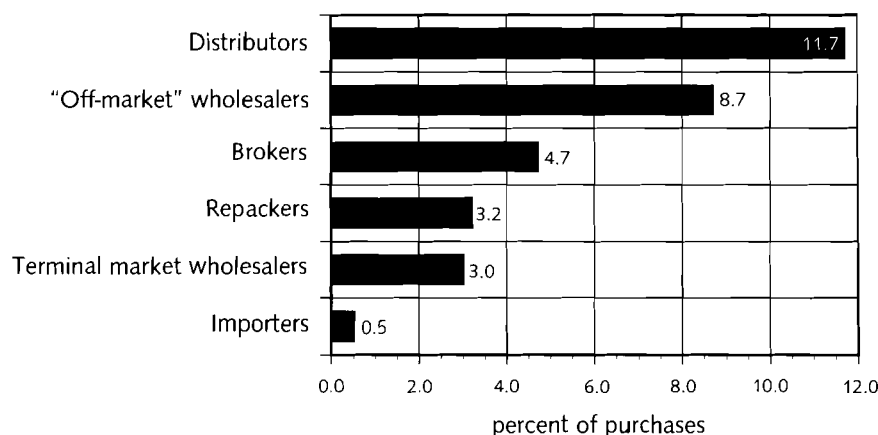
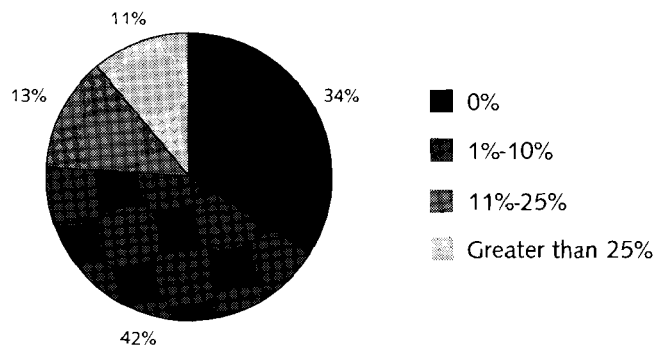


FIGURE 3.30**Wholesaler Purchases Via Brokers, by Firm Classification**

Contracting: Contracting appears to be a purchase arrangement of increasing popularity with some produce firms. Generally contracts consist of an agreed price and/or quantity, often with specified quality conditions, for a specified length of time. Recent trade press reports and industry interviews indicate an increase in the use of contracts, especially between foodservice suppliers and their customers. However, little is known about the use of contracts between wholesalers and their suppliers. Most of the demand for contract pricing appears to emerge from the retail and foodservice sectors.

For wholesalers contract pricing does not fit into the general tradition of pricing by supply and demand. However, contracts for the packaged salads and fresh-cut fruits, are becoming more important even in the wholesale sector due to the stable f.o.b. pricing of these items.

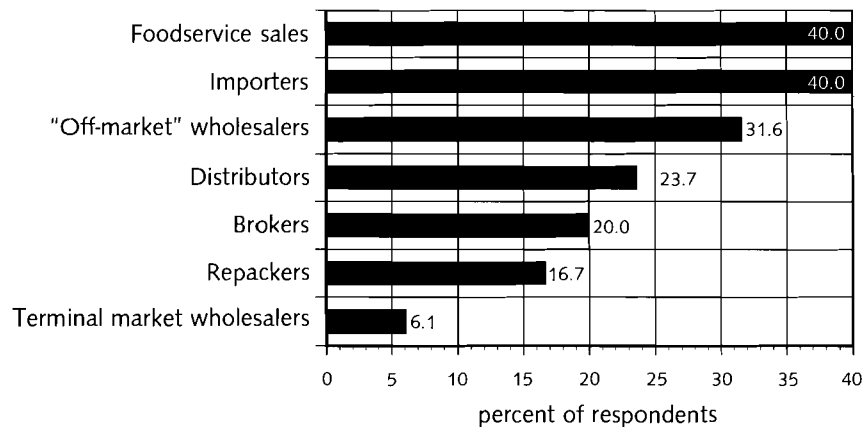
A large majority, 76 percent, of wholesale respondents reported that 10 percent or less of their purchases are made on contract, while 34 percent indicated that *none* of their purchases are made on contract (Figure 3.31). However, 24 percent of wholesalers did indicate that contract sales amounted to greater than 10 percent of their purchases.

FIGURE 3.31**Percent of Produce Purchases Made with Contract Pricing**

Contract pricing is a function of firm classification. Importers use more contracts than do other firms. Forty percent of importers state that over 10 percent of their purchases are made with some form of contract (Figure 3.32). In addition, foodservice suppliers use more contract pricing than other wholesalers. Forty percent of foodservice suppliers use contracts for more than 10 percent of their purchases. Thirty-two percent of “off-market” wholesalers state that over 10 percent of their purchases are by contract. Terminal market wholesalers on the other hand are most likely *not* to use contracts, as only 6.1 percent say they use contracts for more than 10 percent of their purchases.

FIGURE 3.32

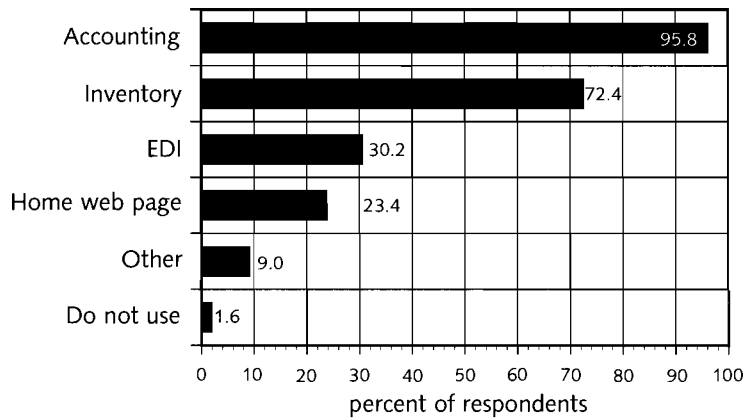
Respondents Purchasing More Than Ten Percent Via Contract Pricing, by Firm Classification



Technology

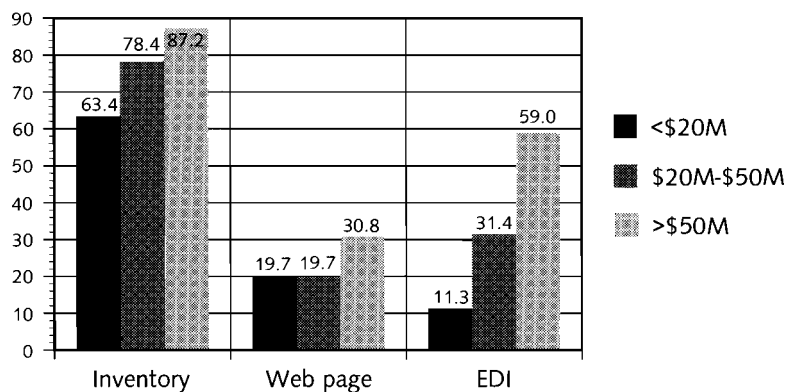
Computers: Since the industrial revolution, technology has driven change in manufacturing and retailing industries. The fresh produce industry is no exception. With the advent of the information revolution, technology is again propelling changes in numerous operations and business practices. Personal computers are used in business applications from purchasing and sales to market research. When wholesalers were asked how they use computers, 96 percent indicate that they use them for accounting purposes including billing, invoicing, and payroll (Figure 3.33). Fewer, 72.4 percent, report using them for inventory management, and 30.2 report using them for EDI.

The use of computers for EDI purposes as reported above may be misleading. Interviews with industry members suggest that while a number of wholesalers may use EDI, they are likely to use it with only one account and only in the most basic way. In addition, while many wholesalers appear to be gearing up for EDI and have purchased computers and software with EDI usage in mind, they are still not operational with EDI.

FIGURE 3.33**Computer Usage by Produce Wholesalers**

Perhaps not surprisingly large firms use computers for more purposes than smaller firms. Whereas all size firms use computers for accounting, more large firms use computers for inventory, Web page, and EDI than do smaller firms (Figure 3.34). In fact, 59 percent of large firms state they use computers for EDI, whereas only 11.3 percent of small firms use computers for EDI.

The costs of purchasing computers and computer software in addition to customizing software packages and training personnel in computer use may prohibit smaller firms from using computers for multiple tasks. Certainly smaller firms are also likely to need inventory management that could be aided by a computer system and may benefit from having a Web page that could advertise the company and also serve to list prices and services which customers could download.

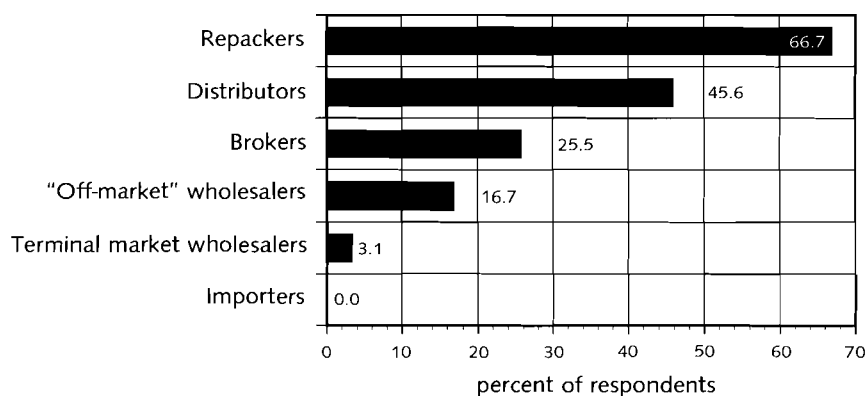
FIGURE 3.34**Computer Usage by Produce Wholesalers, by Firm Size**

Not surprisingly fewer brokers (42.5%) report using computers for inventory management than any other firm classes. But more brokers and distributors tend to use computers for Web pages than others (25.3% and 24.6% respectively).

Electronic Data Interchange: There is also a large variation in the types of firm which report using EDI. Distributors and repackers report using EDI much more than do wholesalers in other classifications (Figure 3.35). Sixty-seven percent of repackers indicate they use computers for EDI as did 45.6 percent of distributors. It is perhaps not surprising that these two groups lead other wholesalers in use of EDI. Distributors, for example, tend to be larger firms who often have larger retail accounts which are more likely to be using EDI with suppliers. What's more, repackers, as a function of their typically limited range of products, have less variation in product quality and condition, perhaps making standardization easier.

FIGURE 3.35

Wholesalers Using Computers for EDI, by Firm Classification

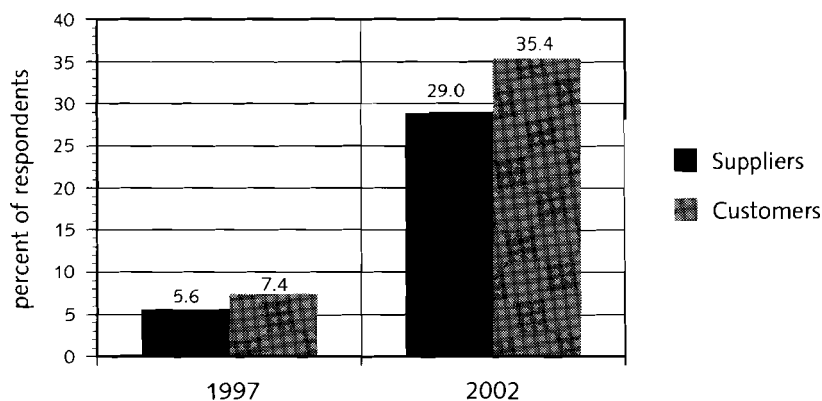


Wholesalers indicated that 5.6 percent of their suppliers currently use EDI and that only a slightly larger number of customers, 7.4 percent, use EDI (Figure 3.36). When wholesalers project to the year 2002, they anticipate these numbers rising significantly. They forecast that 29 percent and 35 percent of their suppliers and customers respectively would use EDI by 2002. It is interesting that even by 2002, wholesalers still anticipate using EDI more with their customers than with their suppliers emphasizing the view that EDI is driven primarily by the retail sector, including foodservice.

Caution should be used when trying to compare these produce industry numbers to those of the grocery industry. EDI in the grocery industry encompasses electronic data interchange which often focuses on streamlining the product ordering and delivery process. Efficiencies gained from electronic ordering then trickle through other levels of order confirmation, inventory management, and logistics. In the fresh produce industry where much of the ordering process depends on personal communication of produce size, grade and quality conditions over the telephone, EDI may not be as easily implemented. However, in produce, EDI may come into play after ordering during the process of confir-

FIGURE 3.36

EDI Use by Wholesaler Suppliers and Customers, 1997 and 2002



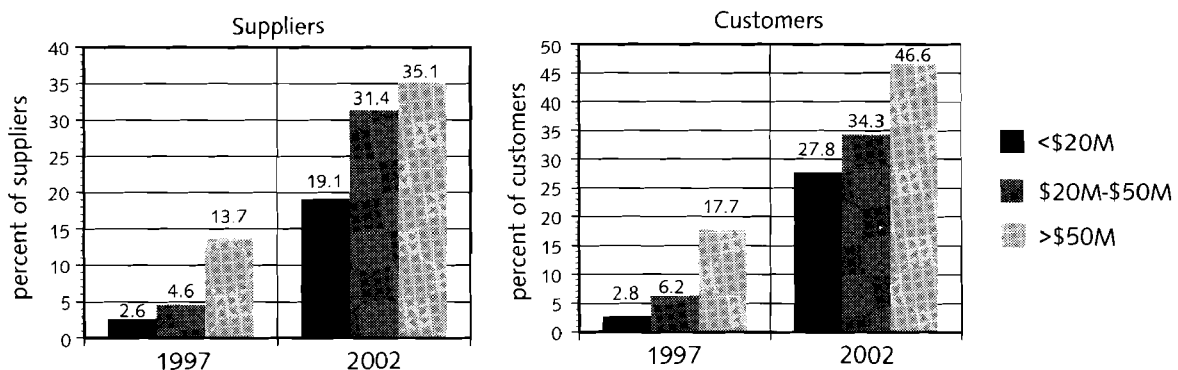
mation, inventory management, warehousing, transportation and logistics. Many industry members also expressed frustration regarding the cumbersome product identification nomenclature required in order to implement EDI in produce as was done in dry grocery.

A closer examination of responses shows that larger wholesale firms lead the way in EDI participation. Firms with over \$50 million in annual company sales report that EDI is used by 13.7 percent of their current suppliers and 17.7 percent of their current customers (Figure 3.37). By 2002, they anticipate 35.1 percent and 46.6 percent of their suppliers and customers respectively will be using EDI techniques.

Although relatively small wholesalers currently do not participate in EDI as much as their largest counterparts, they, too, apparently see the possibilities in efficiencies gained using EDI. By 2002 even the smaller firms anticipate significantly more of their suppliers and customers—indeed a tenfold increase in only five years time—will use EDI (Figure 3.37).

FIGURE 3.37

Wholesaler Suppliers and Customers Using EDI, 1997 and 2000, by Firm Size



Partnerships

Partnerships between supermarket retailers and their suppliers streamline logistics and assist in coordinating efficient responses to consumer demands. In this study, a partnership was defined as a “formalized business commitment with joint objectives where confidential information is shared.” EDI and partnerships are often used hand in hand.

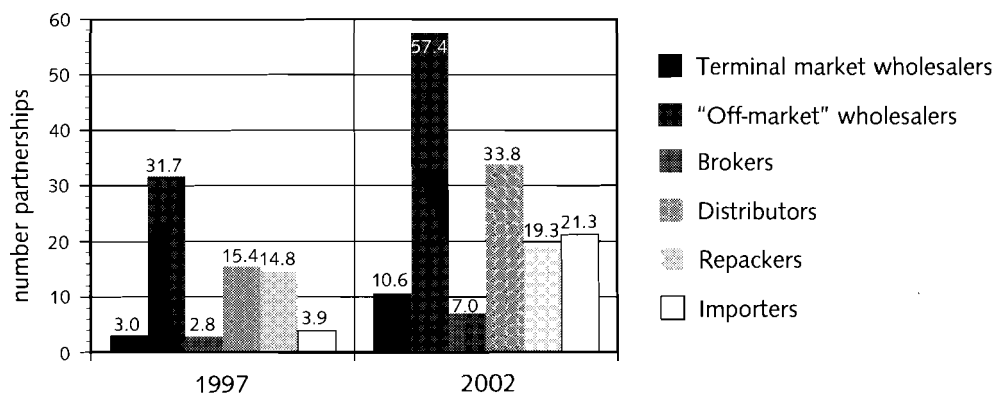
The number of suppliers and/or customer partnerships established by individual wholesalers ranges widely. The average number of current partnerships is 11 per firm, however, over 50 percent of the respondents report having 2 or fewer. Wholesalers believe in the concept of partnerships, as the number of partnerships is expected to grow to an average of 26 in 2002.

Wholesalers who transact a large portion of their sales with retailer chains report having the most partnerships, perhaps suggesting that partnership arrangements are driven by the retail sector. “Off-market” wholesalers, 40.5 percent of whose sales go to major retail firms, report having the largest number of partnership arrangements (32) (Figure 3.38).

While foodservice suppliers report having roughly the same number of partnerships as all other firms, they forecast enormous growth by 2002 when they expect to have on average 65 partnerships per firm.

FIGURE 3.38

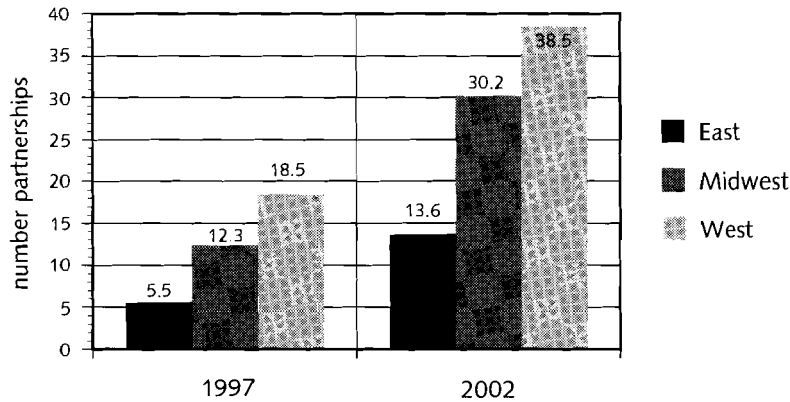
Number of Wholesaler Partnerships, by Firm Classification



The number of partnerships increases with firm size. Large firms report 17 partnerships currently, while medium and small firms report having only 14 and 9 partnerships respectively. What is more, large regional differences appear to exist regarding wholesaler partnerships. Eastern wholesalers report the fewest number of partnerships while Western firms report the most (Figure 3.39).

FIGURE 3.39

Number of Wholesaler Partnerships, by Region



Distribution

Shrinkage and losses as well as reconsigned shipments may be used as proxies to evaluate certain aspects of quality performance in distribution channels. Wholesalers indicate that 5.3 percent of product is reconsigned and 3.6 percent is lost due to shrink and other losses (Table 3.15). Reconsignment occurs when, instead of rejecting a load of produce outright, many wholesalers are able to find an alternative outlet for the product and renegotiate purchase terms with the original seller.

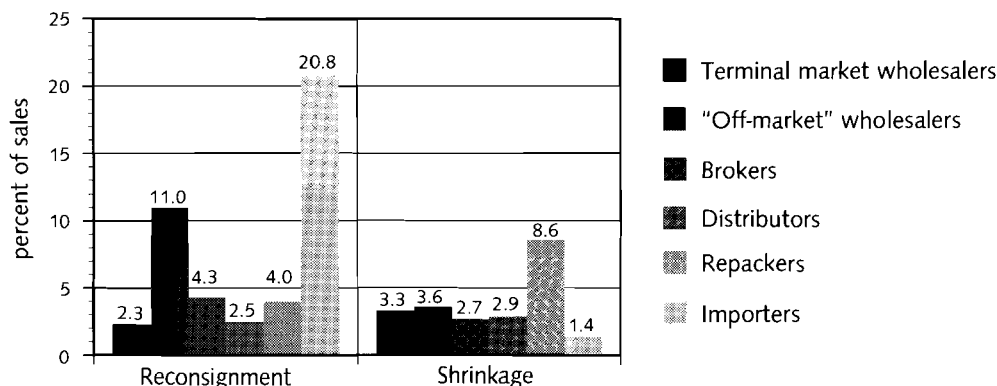
TABLE 3.15

Sources of Wholesaler Losses

	Percent
Reconsigned	5.3% of arrivals
Shrinkage & loss	3.6% of sales

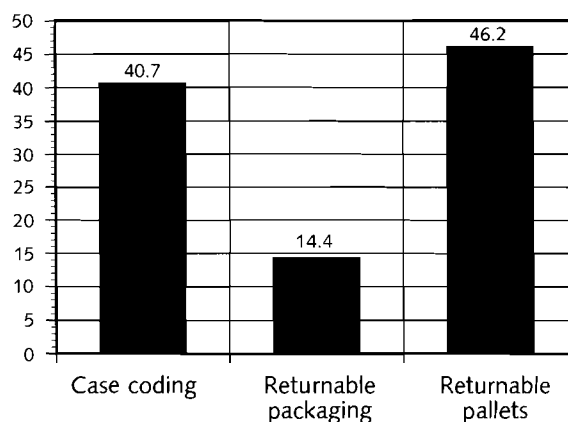
Reconsignment and shrink vary by wholesaler classification and by firm size. Importers report the highest reconsignment rate at 20.8 percent of sales, a rate very high compared to other wholesalers but perhaps to be expected considering the product deterioration that may occur during the long distances some imported produce travels (Figure 3.40). Repackers, also not surprisingly, report the highest shrink at 8.6 percent. Importers report the lowest shrink (1.4%) perhaps because their reconsignment is so high coupled with the infeasibility of returning the shipment.

Distributors and brokers, who often do not physically handle product, report the smallest reconsignment and shrink when combined.

FIGURE 3.40**Wholesaler Reconsignment and Shrinkage, by Firm Classification**

Among the current initiatives to improve distribution system efficiency are case coding, returnable packaging, and returnable pallets. Case coding, used extensively to facilitate inventory flow and warehouse management as well as cross docking in the grocery distribution system, has met with mixed acceptance in the produce wholesaling sector. Overall, 40.7 percent of wholesalers indicate that they use case coding (Figure 3.41). Seventy percent of "off-market" wholesalers, those wholesalers not located on a terminal market site, indicate that they use case coding at least to some extent (Figure 3.42). This may be expected given the greater presumed need for inventory handling efficiencies for wholesalers who own large warehouse facilities. Only 21.1 percent of terminal market wholesalers, however, indicate that they use case coding.

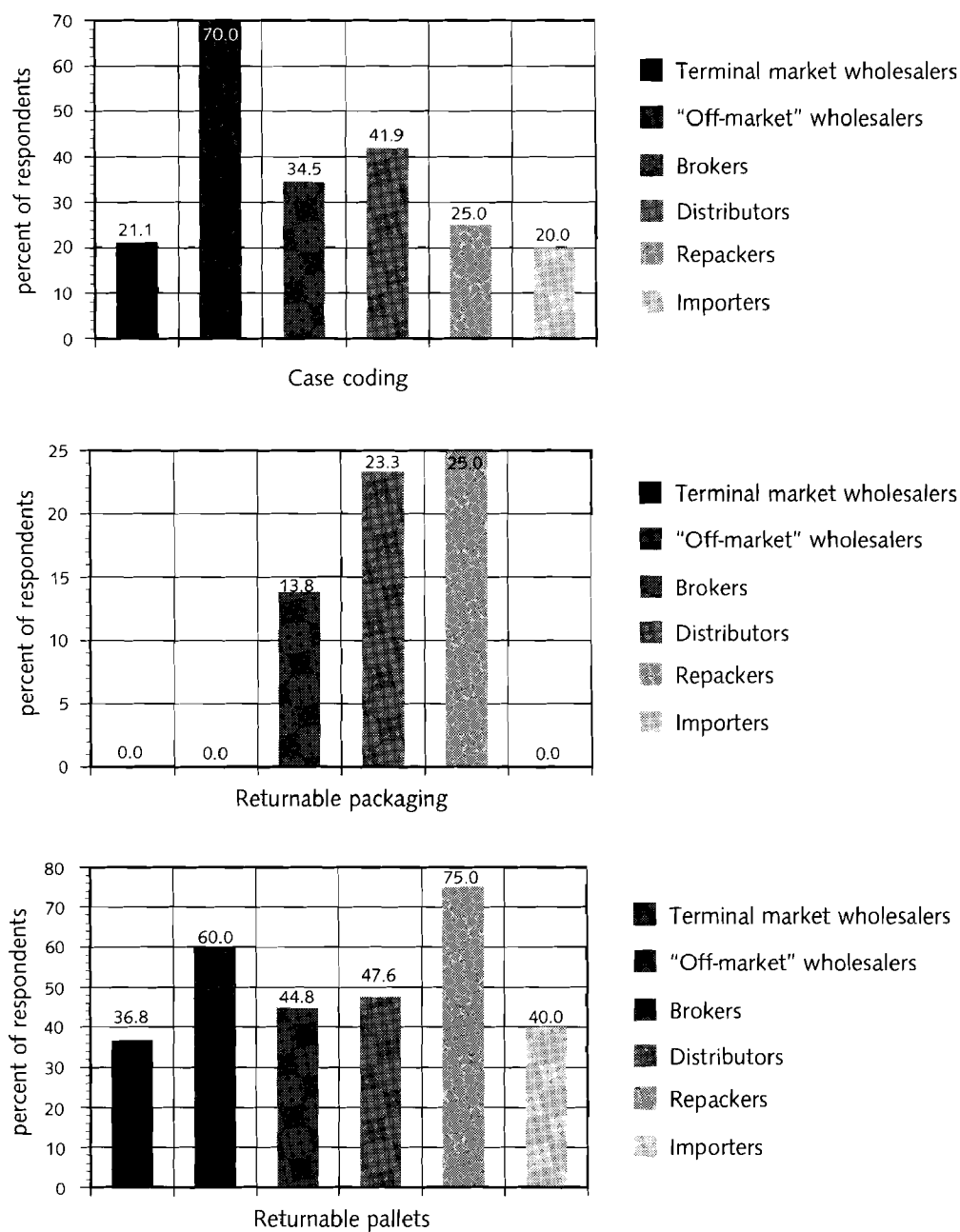
Returnable packaging, such as plastic cases which can be returned to the packing source, has benefits in terms of stackability, durability and economics. However, few companies, only 14.4 percent of wholesalers, indicate that they use returnable packaging of any sort. And when viewed by wholesaler classifications, only brokers, distributors and repackers report they use returnable packaging at all (Figure 3.42).

FIGURE 3.41**Wholesaler Use of Case Coding and Returnables**

Repackers and “off-market” wholesalers report using returnable pallets more than other wholesale classes (Figure 3.42) while fewer terminal market wholesalers report using them.

FIGURE 3.42

Wholesaler Use of Case Coding and Returnables, by Firm Classification



Summary

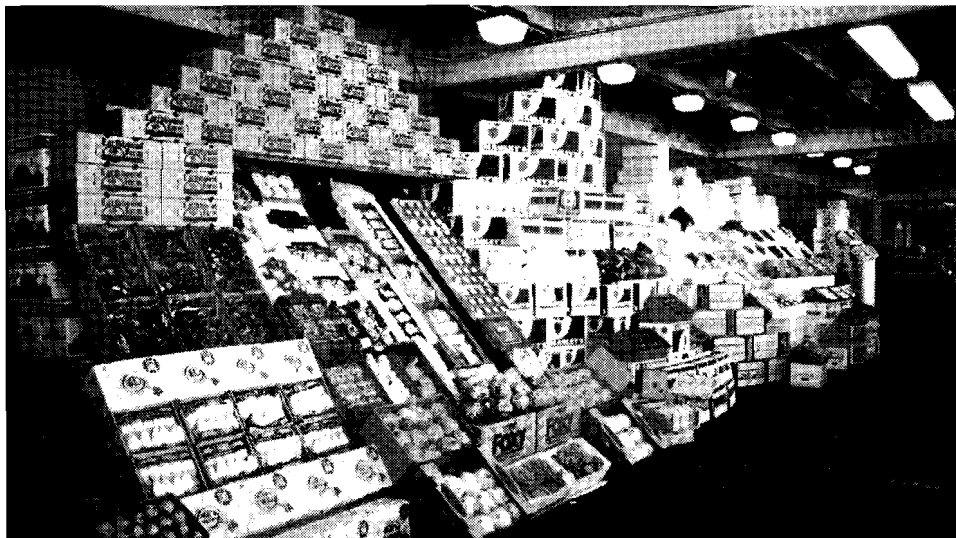
- *In general, wholesalers' preferences for terms of purchase vary according to their own level of involvement with transportation systems, although the f.o.b. terms are still the most preferred. The importance of terminal market wholesalers in handling consignment or price-after-sale terms is evident as 39 percent of all their purchases are handled using a price deferred mechanism.*
- *Demand for contract pricing appears to be driven by retail and foodservice sectors. For wholesalers, contract pricing does not fit into the strong tradition of supply and demand pricing. However, contracts for certain packaged products, especially salads, are more acceptable due to the stable f.o.b. pricing of these items.*
- *Wholesaler use of EDI may be misleading. Interviews with industry members suggest that while a number of wholesalers claim to use EDI, they are likely to use it with only one account and in only the most basic way. In addition, while many wholesalers appear to be gearing up for EDI and have purchased computers and software with eventual EDI usage in mind, they are believed not to be currently operational with EDI.*
- *In an industry where much of the ordering process depends on personal communication of produce size, grade and quality conditions over the telephone, EDI may not be easily implemented. However, in produce, EDI may come into play after completion of ordering, during the process of confirmation, inventory management, warehousing, transportation and logistics.*
- *Industry initiatives to improve distribution system efficiency include: case coding, returnable packaging, and returnable pallets. Implementation of these initiatives is a function of wholesaler classification and business activities. Activities which include produce handling, warehousing, and/or repacking facilities benefit from the use of these initiatives.*

SECTION 4

Summary and Industry Perspectives

Changes in the fresh produce industry from producers to final consumers are posing challenges to the wholesale sector in such a way that those who can meet them will be the future industry leaders.

The wholesale sector of the fresh produce industry is composed of widely diverse wholesaling firms. The firms are diverse in the activities and functions they perform whether they are traditional terminal market wholesalers or brokers offering importing and warehousing services. They also vary substantially in the size of their operations. Some companies report over \$1 billion in 1996 company sales, while others sell less than \$1 million annually. Such diversity makes reporting industry “averages” difficult as averages in some cases can be misleading. However, the diversity also points to the many opportunities open for companies and the myriad of market approaches employed by industry members.



Wholesaler Profile

The survey response consisted of 205 wholesale firms whose company sales totaled an estimated one-quarter of the U.S. fresh produce wholesaling sector. Entry into and exit from the produce wholesale sector is still relatively easy with moderate requirements in capital investment. This along with a low concentration of firms and an increase in per capita consumption of fresh fruit and vegetables point to an industry with many growth opportunities.

"Blurring of Boundaries"

The number of operations in which individual wholesale firms are engaged is becoming more numerous and diverse. Former boundaries of wholesale businesses defined by tradition have become indistinguishably blurred. Although wholesalers classify themselves according to traditional definitions such as broker, distributor and receiver, they have increasingly taken on numerous secondary activities. Today wholesalers who physically handle and warehouse produce also often engage in brokering services and brokers often engage in physical wholesaling activities and often own product. Some "wholesalers" charge commission; some "brokers" take title. In addition, today's distributors may re-pack, import, and cut and package produce.

This expansion of the traditional wholesaler into non-traditional activities has allowed them to expand their operations in ways other than merely expanding volumes and/or product lines. Many wholesalers have become a "one-stop shopping" supplier for their customers in the sense that the company can fulfill many more customer needs. For example, retailers who need stone fruit year-around, along with fresh cut fruit, drop shipments at each store, and produce category management may now find all their needs in one wholesale company rather than finding four different suppliers to fulfill each need separately.

Financial Status

1996 wholesale company sales range widely from \$20,000 to \$4.5 billion with an average of \$98.8 million. Average wholesaler produce sales in 1996 were \$41.6 million. However, the importance of produce versus non-produce sales varied considerably by firm size. Small and medium sized firms tend to sell produce as their primary business. In general, the very largest firms, whose annual sales exceed \$300 million, are considerably more diverse with produce sales accounting for a much smaller portion of their total business. However, even though these firms cannot be fairly classified as "traditional produce wholesalers," they sell very large volumes of produce usually in direct competition with the produce wholesaler.

Buying Power

When combined, retail stores and foodservice operators purchase roughly 50 percent of the volume of U.S. fresh produce directly from grower/shippers, while approximately 50 percent of U.S. produce moves through wholesalers including brokers. From these estimates it appears that the purchasing power of the wholesale sector is equal to that of the retail/foodservice sectors when assessing grower/shipper conduct towards retail and wholesale customers.

Grower/shippers rely on individual accounts, with 57.5 percent of their sales going to their top ten customers. Because there are fewer individual retailers, on average, each retailer has more buying influence and purchases greater volume than each individual wholesale account. And according to U.S. Bureau of the Census numbers, there are approximately 6,000 fresh produce wholesale outlets and perhaps as many as 4,000 different wholesale firms. These individual wholesale firms, being somewhat smaller than retailers, are perhaps more fragmented with less individual purchasing power.

However there are many more individual wholesale firms—and thus buyers—with which to conduct business than there are integrated grocery wholesale and retail chains of which there are only approximately 250. On a practical basis, this means that for every retail account, a produce shipper may have 16 wholesaler accounts. Of course, a few large wholesalers do have as much buying power as leading retail firms (see Table 3.7). Also the function of a wholesaler account to a grower/shipper may be much different than their retailer account. This is discussed under “Supplier Relations” below.

Inventory Management and Service Opportunities

The growing and complex array of SKUs handled by today’s fresh produce industry is being driven by contemporary consumer interests in convenience, improved taste, quality, and variety. This has impacted the wholesaler’s product mix which is expanding and becoming more complex, including substantial sales of packaged produce, retailer private labels and own wholesaler labels, UPC and PLU codes, and non-traditional produce items. Proliferation of new produce varieties and new packaging has enhanced sales of value-added produce by wholesale companies. In addition, non-traditional produce items including specialty produce, packaged salads, organics, fresh squeezed juice, and fresh cut fruit now contribute up to 27 percent of total wholesaler sales.

With the proliferation of specialty products, packaged salads, and other consumer packages, wholesalers are now responsible for managing a larger number of items than in the past. The number of SKUs carried by wholesalers depends on firm size. New produce items were introduced by wholesalers at a rate of 24 new items in 1996. In addition, 27 new non-produce items were introduced. However, most of the new non-produce items are introduced by the largest firms who tend to carry more non-produce items than the “average” produce wholesaler.

Wholesalers’ customers are experiencing the same situation. Retailers are expanding the number of items in the produce department, however, physical capacity is limited in existing supermarkets, and retailers have not substantially increased the square footage of their produce departments since 1994. As retailers accept more items and increase their SKUs of non-traditional items such as packaged salads and specialty produce, shelf space for the traditional, high volume produce items will be sacrificed. Therefore, retailers will need to rely more heavily on more advanced management practices such as: category and shelf management, just-in-time delivery, cross-docking, and merchandising analyses.

Produce wholesalers need to be aware of the opportunities this is likely to create. Retailers are increasingly interested in services which help them manage the produce department. Services such as shelf-space management and planograms have already become more important along with PLU coding to facilitate predicting product movement during promotions.

Growth through Relationships

Customers and Services

The two most significant customer bases for produce wholesalers are major retail/wholesale grocery chains (34 percent of sales) and foodservice operations (27 percent of sales). As such, many wholesaler services are directed at these customers. The number of wholesalers offering merchandising services has increased tremendously in the last 40 years, to the point that wholesalers offer an expansive set of services today as the rule not the exception. “Guaranteeing prices for promotions” and “providing price concessions for promotions” are now services offered by the vast majority of wholesalers. However, many fewer wholesalers offer “assistance to retailers with displays” and “providing retail training” perhaps suggesting further opportunities for distinguishing performance through expanded services.

Wholesalers who understand how to conduct and analyze merchandising and promotions in the retail produce department will be better able to provide tailored services to their customers. Retailers in the *FreshTrack 1997* survey report that the greatest sales increase from a sales promotion occurs in response to a 25 percent price reduction combined with a demonstration and/or sampling; a nearly similar sales response is achieved with a major ad.

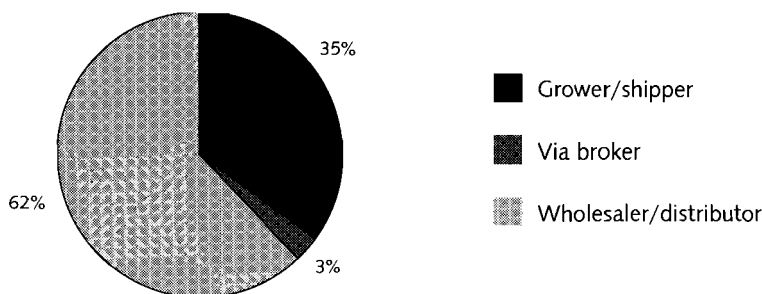
Produce wholesalers cannot compete against grocery manufacturers with their substantial promotional budgets. However, knowing the tremendous response achieved by demonstrations, they can use this opportunity to better align their service offerings to that of their retail customer. In addition, since small retailers use produce in more cross-merchandising than do large chains (*FreshTrack 1997*), the former may be looking for more products and information on cross-merchandising from their suppliers.

This is especially true for small independent retailers who do not have the headquarters personnel large chains do to assist with such things as merchandising, promotions, and category management. Small retailers, with annual sales of less than \$300 million, report that 40.4 percent of their produce purchases are from full-line grocery wholesalers and 23.6 percent from produce wholesalers. This suggests an enormous opportunity for produce wholesalers to provide the services and the quality that independents need.

For the produce wholesaler, the growing trend of consumption away-from-home has created another huge opportunity. Already, foodservice operators are a growing customer base. In fact, 62 percent of foodservice produce purchases are from wholesalers while only 38 percent are grower/shipper direct or broker facilitated (Figure 4.1). Foodservice operators’ needs for frequent deliveries of small volumes will preclude many of them purchasing direct from grower/shippers. The challenge for the wholesaler will be to continue to develop transportation and logistics systems that will enable them to fully service these smaller volume operators.

FIGURE 4.1

Source of Produce: Foodservice
-percent of total purchases-



Suppliers and Supplier Key Attributes

Although produce wholesalers typically procure their products from hundreds of different grower/shippers, their main volume comes from a relatively few major suppliers. Almost three-quarters of the quality, price, delivery, and overall performance of wholesalers' products are determined by ten principal suppliers. Small firms in particular rely even more heavily on their top suppliers, perhaps because they are purchasing in smaller volumes and do not need a large number of suppliers to fill their demands.

In general, wholesalers purchase 67 percent of their produce from grower/shippers. This does not vary by firm size. However, Eastern and Midwestern companies purchase less of their produce direct than do Western wholesalers and they also utilize brokers more than Western firms indicating there is still an opportunity for wholesalers to service customers located away from the production areas.

Wholesalers were asked to rate how their most highly regarded suppliers perform compared to their average suppliers in order to try to understand what motivates wholesalers to do business with certain suppliers. Attributes grouped under the category "quality" are considered most important by wholesalers. "Reputation" is also very important with "supplies," "price," and "packaging and logistics" somewhat less important.

The two individual attributes with the highest rankings are: "honesty and integrity" and "positive reputation." This indicates that in an industry filled with "opportunism" and highly competitive pricing behavior, a strongly positive reputation may, for many, be a differentiating factor. Companies recognizing the importance of their suppliers may recognize also that distrust can lead to missed opportunities in discovering system efficiencies and performance improvement.

Wholesalers' customers, specifically retailers and foodservice operators, were also asked to rate *their* most highly regarded suppliers on exactly the same attributes. Retailers indicate that quality and reputation were the major categories important to them when doing business with their produce suppliers. Foodservice executives rely very heavily on suppliers' reputations when selecting a preferred supplier. Apparently implicit within the idea of "reputation" is "quality." Therefore, according to these responses, wholesalers should practice honesty and integrity along with providing quality produce.

The Wholesaler as Grower/Shipper Customer

Wholesalers purchase approximately 67 percent of their produce directly from grower/shippers. Due to such volume of business and growing importance of business relationships and indeed partnerships, wholesalers should be aware of how their performance is evaluated by their grower/shipper suppliers.

Grower/shippers' customers possess certain characteristics which may be important to grower/shippers' needs for sales and profitability. To understand these characteristics and how different customer types perform, grower/shippers were asked to rank each customer type on various characteristics from 1 to 5; where 1 is the customer type with the "poorest performance" and 5 is the "best."

For clarity, characteristics were grouped into four categories: business conduct, product movement, market knowledge and innovation, and prices and payment. In general, grower/shippers express a higher level of satisfaction with the performance of large chains and smaller retailers than with other buyer

TABLE 4.1

Evaluation of Customer Characteristics, by Customer Type¹

Customer Characteristic	Large chain	Small retailer	Food-service	Wholesaler	Broker
Business Conduct					
Easy to conduct business with	3.35	3.69	3.07	3.28	3.03
Contributes to my firm's profits	3.78	3.60	2.91	3.04	2.63
Offers EDI	3.96	2.76	2.69	2.15	1.93
Provides regular orders	3.90	3.63	3.23	3.41	2.90
Product movement					
Ability to move surplus product	3.00	2.74	2.09	3.79	3.51
Willing to accept multiple quality standards	2.05	2.71	2.51	3.82	3.28
Market knowledge and innovation					
Innovative	3.57	3.72	2.93	2.65	2.43
Willing to try new ideas/products	3.34	3.72	2.98	3.04	2.65
Knowledgeable about product care and handling	3.47	3.39	3.36	3.60	2.65
Knowledgeable about local markets	3.18	3.58	2.83	3.98	3.35
Prices and Payment					
Flexibility in ad pricing	3.27	3.86	2.55	3.03	2.83
Pays good price	3.59	3.79	3.45	2.76	2.45
Pays promptly	3.80	3.73	3.35	3.00	2.76

¹ Firm types ranked from 1 to 5; where 1 = "poorest performance" and 5 "best performance."

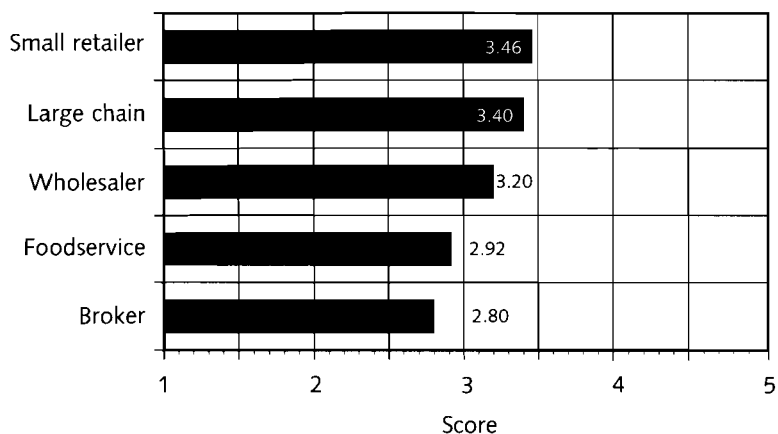
categories. Large chains and small retailers rank very well in business conduct characteristics. Conversely, brokers rank poorest in terms of business conduct (Table 4.1).

Wholesalers perform well in product movement characteristics, offering the ability to handle surplus product and multiple quality standards, while foodservice does not perform as well in this category. Small retailers are perceived as the most innovative by grower/shippers while wholesalers are seen as most knowledgeable about product care and handling and also about the local market. Prices and payments are seen as being handled best by retailers, both large chains and small retailers.

When individual characteristic rankings are averaged by firm type, the differences in rankings among firms are not large. The firm type that grower/shippers rank with the overall best performance, according to the characteristics provided in this survey, is small retailers with an overall ranking of 3.46 (Figure 4.2). Large chains rank second with a score of 3.40, with wholesalers ranking 3.20, foodservice 2.92, and brokers 2.80. Despite the importance of their role and the stability of the business, brokers rank last among customer types in 10 out of the 13 characteristics assessed in this study.

FIGURE 4.2

Average Rankings for Customer Characteristics, by Customer Type



The interviews conducted for this study clearly demonstrate that wholesalers are indispensable to grower/shippers in moving surplus produce and produce of variable quality. However, challenges for wholesalers lie in convincing grower/shippers of their willingness to try new products and ideas and to experiment with new approaches. Opportunities may also exist in partnering with the small retailers, who are ranked very highly by grower/shippers, and continue to serve them in ways that will also benefit the grower/shipper relationship.

Operations

Terms of trade

In general, wholesalers' preferences for terms of trade—f.o.b., delivered price, or price deferred—vary according to market conditions, individual commodities, and involvement with transportation systems. Supply conditions on the grower/shipper side of the distribution system can influence the proportion of produce sold via delivered price. If shippers need to move surplus produce they can offer certain “deals” on produce that is delivered to customers (delivered price) and thereby not sacrifice their f.o.b. price.

Retail chains and foodservice operators who buy direct may not be as flexible as wholesalers in being able to accept delivered price “deals” because they often already have trucks on the road and need to utilize them most efficiently. This is one example of how wholesalers are critical components of the produce system and particularly to grower/shippers by helping to absorb extra product in long market situations.

In addition, the importance of the terminal markets for handling and absorbing produce being sold by price deferred methods—consignment or price-after-sale—is significant, especially since no other business type (except importers) handles any significant amount of produce on price deferred terms.

Much of the demand for contract pricing is from the foodservice and retail sectors. Foodservice executives report extensive use of contract pricing when procuring produce: on average, about two-thirds of firms report using contracts for over 25 percent of their purchases, while only 6 percent report they do not use contracts at all when purchasing produce. For traditional wholesalers, contract pricing contradicts the time-honored method of pricing by supply and demand. However, contracts for prepackaged product, especially salads, are becoming more acceptable due to the stable pricing of these items from shipping points.

Logistics

Generally, retailers are much more experienced using EDI techniques with their grocery businesses, however, using EDI with produce is still emerging. Much of the ordering process for fresh produce is still very dependent on the personal communication of produce size, quality, and grade conditions and therefore may not yet be appropriate for EDI. As numbering standards become defined for some of these criteria, however, EDI use is likely to become more widespread for the processes of order confirmation, inventory management, warehousing, transportation and logistics, and category management.

Currently, larger produce wholesaler firms are leading the way in EDI acceptance, yet small and medium sized firms anticipate using EDI significantly more in the future. At this time, EDI is a mystery to most firms who have yet to make the large investment in time and money to become operational with EDI.

Use of case coding and returnable packaging and pallets depends on wholesaler business type. Case coding is currently being used more by “off-market” wholesalers than any other business class, apparently for better inventory management and cross docking purposes. No terminal market wholesaler, “off-market” wholesaler, or importer reported using any returnable packaging. Some returnable packaging is being used by repackers, distributors, and brokers.

EDI has huge potential for being used with the growing complexity of the fresh produce system. The information from this report only serves to reinforce this. First, growing numbers of items from value-added packaging and products to non-traditional produce and growing interests in private label and branding programs are stressing a distribution system unaccustomed to handling the volume of information needed to efficiently manage the huge growth in items.

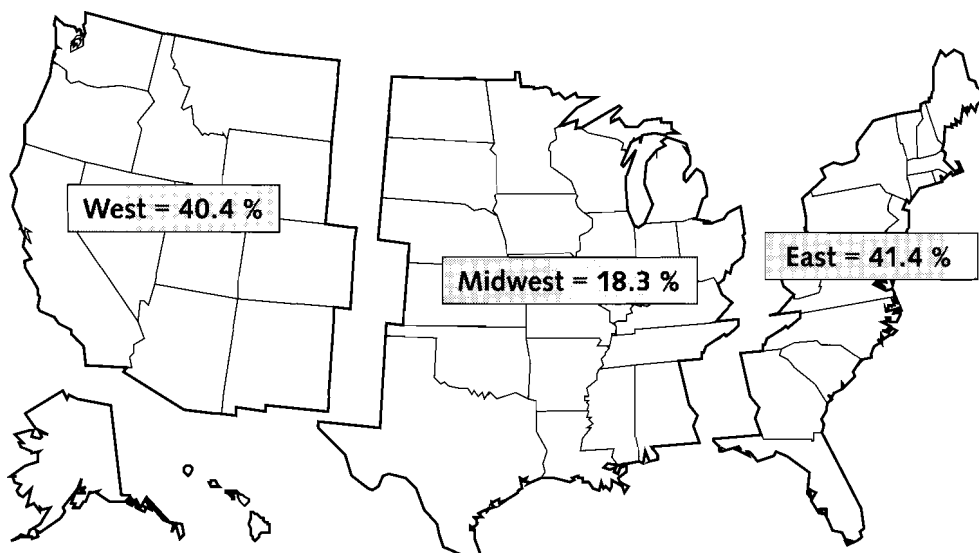
Also, supermarkets and foodservice establishments are not growing in physical size at a rapid enough pace to accommodate the increase in number of produce items. This creates a huge demand for logistics systems that will service the retail and foodservice sectors with such services as just-in-time delivery, effective ordering, planograms, and re-stocking systems especially for high volume products whose shelf space is being encroached upon by non-traditional items.

These demands for greater information handling and logistics systems are challenges which should also create opportunities for any company that is a produce supplier whether grower/shippers or wholesalers. The companies who respond to these challenges and turn them into opportunities will be the future leaders in the fresh produce industry.

Appendix A

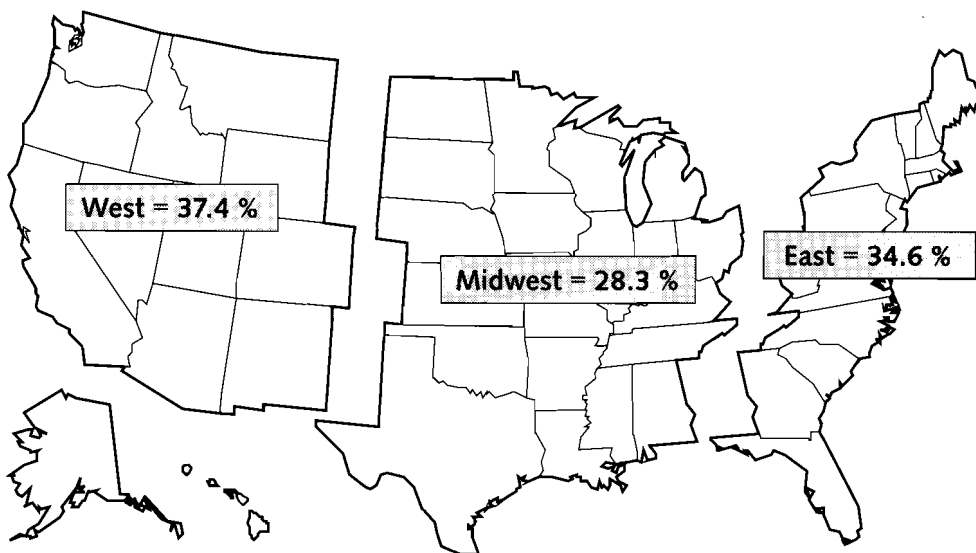
APPENDIX A-1

Location of Produce Brokers by Region, 1997. Percent of Total Brokers



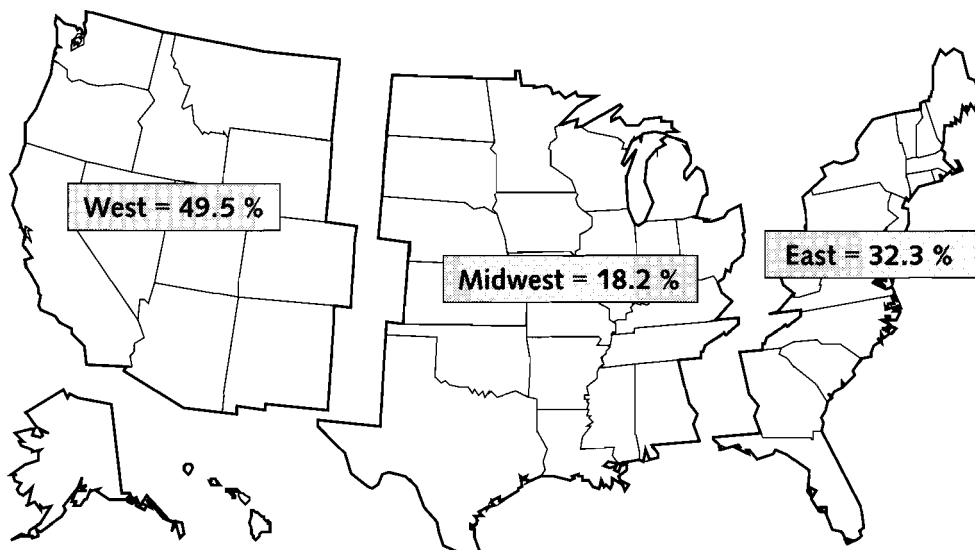
APPENDIX A-2

Location of Produce Wholesalers, by Region, 1997. Percent of Total Wholesalers



APPENDIX A-3

Location of Produce Shippers by Region, 1997. Percent of Total Shippers.



Source: Produce Reporter Co. (1996) *The Blue Book*.

Appendix B

TABLE B.1

Business Classification, by Region of the U.S.

	East	Midwest	West
Terminal market wholesalers	70.6	17.6	11.8
"Off-market" wholesalers	23.8	52.4	23.8
Brokers	39.1	23.9	37.0
Distributors	36.5	27.0	36.5
Repackers	33.3	33.3	33.3
Importers	81.8	9.1	9.1

TABLE B.2

Business Classification, by Firm Size

	<\$20M	\$20M-\$50M	>\$50M
Terminal market wholesalers	55.6	29.6	14.8
"Off-market" wholesalers	36.8	57.9	5.3
Brokers	58.5	19.5	22.0
Distributors	25.4	37.3	37.3
Repackers	25.0	50.0	25.0
Importers	58.3	25.0	16.7

TABLE B.3

Percent Gross Margin, by Firm Classification

	% GM
Terminal market wholesalers	16.0
"Off-market" wholesalers	18.9
Brokers	9.9
Distributors	16.6
Repackers	17.1
Importers	6.7

TABLE B.4

Labeled Produce Sales, by Firm Classification

	Retailer private label	Own wholesaler label
Terminal market wholesalers	4.2	16.4
"Off-market" wholesalers	11.8	10.0
Brokers	4.2	15.3
Distributors	4.9	16.9
Repackers	15.0	51.0
Importers	0.0	47.9

TABLE B.5

Non-Traditional Produce Sales, by Firm Classification

	Specialty	Prepackaged salad	Organic	Juice	Cut Fruit
Terminal market wholesalers	16.6	0.3	0.2	0.2	0.3
"Off-market" wholesalers	10.9	0.5	0.8	0.8	0.5
Brokers	10.6	0.1	9.1	9.1	0.1
Distributors	10.5	1.5	2.8	2.8	1.5
Repackers	12.0	4.0	0.2	0.2	4.0
Importers	49.4	0.0	0.0	0.0	0.0

TABLE B.6

Percent Growth in New Items, by Firm Classification

	New produce items	New non-produce items
	<i>-percent-</i>	
Terminal market wholesalers	4.7	0.1
"Off-market" wholesalers	7.3	3.1
Brokers	9.1	0.8
Distributors	4.6	6.9
Repackers	12.1	0.0
Importers	7.1	0.0

TABLE B.7

Sources of Wholesaler Produce Purchases, by Firm Size

	Grower/shipper	Broker	Importer	Other Wholesaler	Other
<\$20M	67	18.1	7.6	7.3	0
\$20M-\$50M	65.1	18.6	7.4	8	0.9
>\$50M	64.5	22.4	6.3	4.5	2.3

TABLE B.8

Sources of Wholesaler Produce Purchases, by Firm Classification

	Grower/shipper	Broker	Importer	Other Wholesaler
Terminal market wholesalers	66.3	19.8	9.6	4.4
'Off-market wholesalers	63.8	22.8	2.9	10.5
Brokers	80.3	9.3	6.7	3.7
Distributors	53.8	26.5	7.1	11.1
Repackers	54	27	0	5
Importers	72.3	3.6	24.1	0

TABLE B.9

Sources of Wholesaler Produce Purchases, by Foodservice Supplier

	Grower/shipper direct	Broker	Importers	Other wholesaler	Other
Foodservice supplier	44.5	34.3	3.4	15.1	2.7
Other	71.1	15.3	7.9	5.3	0.5

TABLE B.10

Produce Purchases from Top Ten Suppliers, by Firm Size and by Firm Classification

Percent of purchases from top ten suppliers	
Firm size	
< \$20 million	79.0
\$20-\$50 million	72.7
> \$50 million	62.6
Firm classification	
Terminal market wholesaler	70.0
"Off-market" wholesaler	78.7
Broker	74.6
Distributor	68.2
Repacker	70.6
Importer	90.3

TABLE B.11

Highly Regarded Supplier Attribute Categories, by Firm Classification

	Quality	Reputation	Supply	Price	Packaging & logistics
Terminal market wholesaler	5.25	5.23	4.38	4.27	4.06
"Off-market" wholesaler	5.75	5.68	4.89	5.14	4.70
Broker	5.30	5.31	4.73	4.24	4.10
Distributor	5.19	5.16	4.44	4.08	4.01
Repacker	5.54	5.33	4.87	4.60	4.00
Importer	4.75	4.89	4.49	4.39	4.19
All	5.42	5.34	4.63	4.37	4.24

TABLE B.12**Leading Supplier Attributes, by Firm Classification**

Attribute Rank	Terminal market wholesaler	"Off-market" wholesaler	Broker	Distributor	Repacker	Importer
1	Salespeople that are knowledgeable	Honesty & integrity	Honesty & integrity	Positive reputation of supplier	Supply large enough to fill demand	Supply large enough to fill demand
2	Supply large enough to fill demand	Highest quality available	Supply large enough to fill demand	Honesty & Integrity	Honesty & Integrity	Price protection on rising markets
3	Positive reputation of supplier	Delivers consistent quality	Positive reputation of supplier	Supply large enough to fill demand	Highest quality available	Kind and courteous salespeople

REFERENCES

- Dillman, Don A. (1978), *Mail and Telephone Surveys: The Total Design Method*. John Wiley & Sons, New York, NY.
- Produce Reporter Co., *The Blue Book*. Produce Reporter Co., Blue Book Services, Carol Stream, IL. Fall 1996.
- National Commission on Food Marketing, 1966. *Organization and Competition in the Fruit and Vegetable Industry*. Technical Study No. 4, National Commission on Food Marketing, Washington, D.C.
- National Association of Produce Market Managers, *Green Book: Produce Market Information Directory*.
- U.S. Department of Agriculture, *Situation and Outlook for Vegetables*. Economic Research Service, U. S. Government Printing Office, Washington, D.C., various years, 1970-1996.
- U.S. Department of Agriculture, *Situation and Outlook for Fruits and Nuts*. Economic Research Service, U. S. Government Printing Office, Washington, D.C., various years, 1970-1996.
- U. S. Department of Agriculture (1964), *The Structure of Wholesale Produce Markets*. Agricultural Economic Report No. 45, Economic Research Service, U. S. Government Printing Office, Washington, D.C.
- U. S. Bureau of the Census (1994), *1992 Census of Agriculture*. Bureau of the Census, U. S. Government Printing Office, Washington, D.C.
- U.S. Bureau of the Census, *Wholesale Trade-Subject Series*. U. S. Government Printing Office, Washington, D.C., various years, 1972-1992.

The Produce Marketing Association

The Produce Marketing Association is a nonprofit trade organization serving 2,500 members who market fresh fruits, vegetables, and floral products worldwide. The association's mission is to create a favorable, responsible environment that advances the marketing of produce and floral products and



services for North American buyers and sellers and their international partners. PMA offers a variety of reference and training materials. For more information, contact: PMA, 1500 Casho Mill Road/PO Box 6036, Newark, DE 19711-6036; Telephone: (302) 738-7100; Fax: (302) 731-2409; WWW: <http://www.pma.com>.

Cornell University Food Industry Management Program

The Food Industry Management Program (FIMP) is one of the nation's oldest and most highly regarded food research and education programs. FIMP offers Cornell University degrees at the bachelor's, master's, and Ph.D. levels, as well as several professional degrees and certificate programs. In addition to a wide selection of traditional business courses, Cornell University offers a considerable number of courses specially designed to provide students with an in-depth understanding of food retailing and distribution. FIMP students learn real-world business through the sharing of ideas with industry guest lecturers, attendance at industry conferences, international study tours, independent research, and summer internships. An active research program is an integral part of FIMP. Research studies are generally carried out in conjunction with food industry trade associations, individual companies, or governmental agencies. A hallmark of the Cornell Food Industry Management Program is the close working relationship that it maintains with food industry companies and their executives. Each year dozens of seminars are conducted for food industry managers both on the campus and around the world. In addition, the Food Industry Management Distance



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